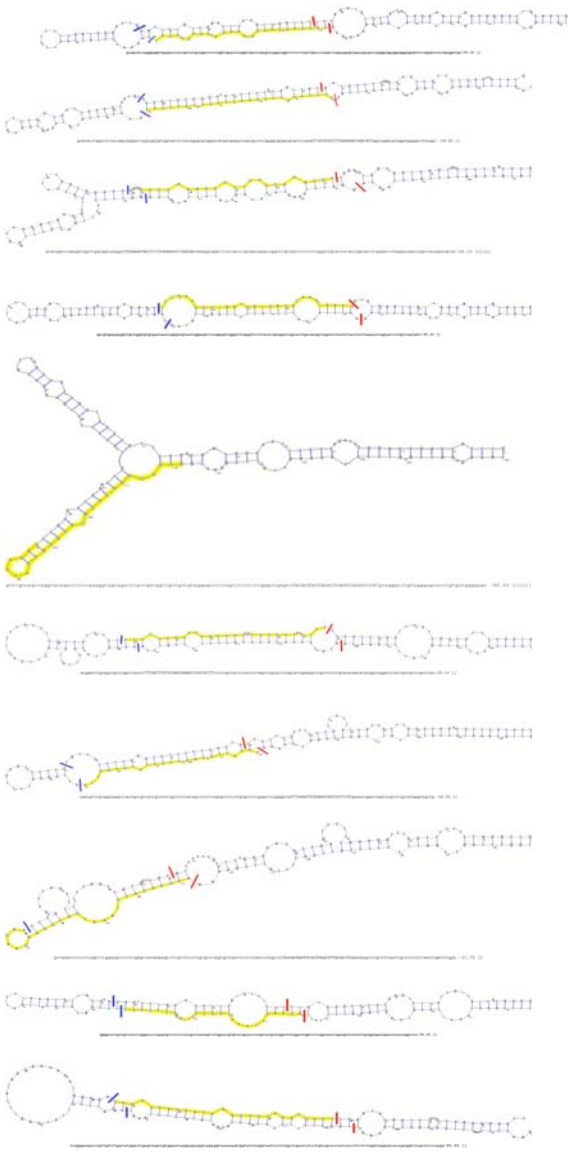
Class	Number	Alignment with hairpin sequence	Reads	Run
high confidence	1	GTGAGCAC ACTTGTTCAAAACCT GTCTCACCACCACC TTGCCCCTCACCAG GGACTGGCACAAAG GACTCCACAAACTT GTTCTGTTTTTGCA TGGCGATGTTTACCT CTCGCAAGCTCTGTGA GCCTTTGGGCGCC AGGCATCCCAGCGT GCTTGGAAGCATGA GCTCTGGGCTGAAG CCCCTCGTCTTCTA C		
		••••••

		TGGA TATGATGACTG	7 P 14-4 -/-
		TGGA TATGATGACTGATT ACTTGA	6 P 14-4 -/-
		TGGA TATGATGACTGA	5 P 14-4 -/-
			52 P 14-4 -/-
high confidence	6	GCAGCATC AGGGAGTTGAAGA CCACTGCTCCTGTAG GCCTCCTGATTTGA TTCAGGCTGTCTCG AATGAAGATGATTT CTCCTAACTCTCCC AAGTCTAGAAAGAT AGAAAGCGATCAG GTGGAGGAGGGAG AGTTCCCGAGTTCT CTGTGACTGT	
		TTGAGAAGAT AGAAAGCGATCAGG GTG	
		TTGAGAAGAT AGAAAGCGATCAGG GTG	5 P 7-1 +/-
			5 P 7-1 +/-
high confidence	7	GCATATCT GGCTCTCACCGACA GGGTTCAGTAGTGT TGGTGTCTCCCACAG AGCGTGGAACATGA TGAAGCCAGTGACC TTGAGGTGGACGT GCTTCAAATTCATG GATCTTGGAAGACG GACACCAGCTGGA TGCAGGTAGAGACC TATGGC	
		TTCATG GATCTTGGAAGACG GACACC	5 P 10-1 +/-
			5 P 10-1 +/-
		TTCATG GATCTTGGAAGACG GACACC	5 P 10-2 +/-
			5 P 10-2 +/-
high confidence	8	GCACGGTC CGAGATGGCTGGCG GTAAGCTGGAAAG GACTCCGGAAAAGC CAAGACAAGGCGG TTTCCCGCTCGCAG CGAGCCGGCTTGTA GTTCCCTTTGGGCT GTATTCCATCGACA CCTGAAATCTAAG ACGACCGCACGG ACGTGT	
		TGGAAAG GACTCCGGAAAAGC CAAGAC	6 P 7-1 +/-
			6 P 7-1 +/-
		TGGAAAG GACTCCGGAAAAGC CAAGAC	8 P 10-1 +/-
		TGGAAAG GACTCCGGAAAAGC CAAGAC	8 P 10-1 +/-
			6 P 10-2 +/-
		TGGAAAG GACTCCGGAAAAGC CAAGAC	6 P 10-2 +/-
high confidence	9	GACGTAAG AGAGTTTGCTGGGT GTGTGAATAAACAG AGTGATGATCCGGA GCCTCAGGAGTTGG GTCTGAGTTCCCT ACACTGTGAGTAG GACCTGACGATGCC AGATTCTATTTTA CCATTTAAAACTC AGTACCCCTGTCTA ATGTC	
		TGAATAAACAG AGTGATGATCCGGA GCCT	7 P 7-1 +/-
		TGAATAAACAG AGTGATGATCCGGA GCCT	7 P 7-1 +/-
non-candidate	10	GTTTGCCA GCGAGGTACAGACT CCTCCAAAGGTAACA GACTTCCTGATGGT TGCTGCTGTAGGAG CCCTCCATTTTCTC CTGGGCTGATCTA CAGTGATGAGCTCA GTCAGGCCGTCGCA GGGCCTGTAGGGA GCACCTGTGCTGGG GAGC	
		TA CAGTGATGAGCTCA GTCAGGGCCGTC	6 P 7-1 +/-
		TGAAAGGTAACA GACTTCCTGATGGT T	24 P 7-1 +/-
		TA CAGTGATGAGCTCA GTCAGGGCCGTC	30 P 7-1 +/-
			15 P 10-1 +/-
		TGAAAGGTAACA GACTTCCTGATGGT T	8 P 10-1 +/-
		TA CAGTGATGAGCTCA GTCAGGGCCGTC	23 P 10-1 +/-
			13 P 10-2 +/-
		TGAAAGGTAACA GACTTCCTGATGGT T	8 P 10-2 +/-
		TA CAGTGATGAGCTCA GTCAGGGCCGTC	21 P 10-2 +/-
high confidence	11	ATGGATCT GCAACTGCTTGGCT TACTTTTTGATTTG TGTGAGCAAAACCG GCGCCTTTCTCCAC CACTTTACCTTTAG CTTGTGTTTCAGTA TTGAAAATCTGCCT TTTTGTACACAACA TGTGGTTAGGTCT CACTGCTGTTTAT CCAT	
		TTTGATTTG TGTGAGCAAAACCG GCGCCTT	6 P 14-1 +/-
		TTTGATTTG TGTGAGCAAAACCG GCGCCTT	5 P 14-1 +/-
		TTGATTTG TGTGAGCAAAACCG GCGCCTTT	11 P 14-1 +/-
potential	12	CAATGTTT GTAAGCAAGTCCAC TGCTGTCACTGTCC TTTGTCTCCCATAG CCCCTCTGAACTC TCCTGTACCCTTGA GCTTTGAGGCTAAT TGGAGTGTAGAATG GGTGTTTTGTAAA CTGGACCGTCTG CCTTGCCATGAGCT GTTG	
		TTTGAGTGTAGAATG GGTGTTTTGT	5 P 7-1 +/-
		TT TGGAGTGTAGAATG GGTGTTTTGT	5 P 7-1 +/-
		TT TGGAGTGTAGAATG GGTGTTTTGT	6 P 10-1 +/-
		TT TGGAGTGTAGAATG GGTGTTTTGT	6 P 10-1 +/-
		TT TGGAGTGTAGAATG GGTGTTTTGT	5 P 10-2 +/-
			5 P 10-2 +/-
non-candidate	13	GCCGAGATC CCCCTTGATTTGGA AGCCCCTTGAGTTA TAAAAGTCTTGTCT TCCTGCGTCCAGTG CTGATCTCTCTGAC CCAGCCTTGGAGGA AGGCAGTAAATGTA CACGCAAAAAGCTT GTTTTAATTGCTT CCTTTAATTGATTT GGT	
		TGGAGGA AGGCAGTAAATGTA CACGCA	7 P 14-1 +/-
		TGGAGGA AGGCAGTAAATGTA CACGCA	7 P 14-1 +/-
			14 P 14-1 +/-
high confidence	14	GGGGCACT GCTGCCAATCTGGG CACCCGAGTGTCCT CTCTATGATCAAAA GTCCTGGGAACGCGT TATGAATCCTAGTT ACGTATGGCTTTTG GATTGGTTCTTGGT AAACTGAAGATTAT TTTTGTGTGGAT GAATTAAACAGGCC CC	
		TGATCAAAA GTCCTGGGAACGCGT TAT	5 P 7-1 +/-
		TTG GATTGGTTCTTGGT AAACTGAAGA	12 P 7-1 +/-
		TTG GATTGGTTCTTGGT AAACTGAAGATT	8 P 7-1 +/-
			25 P 7-1 +/-
high confidence	15	CCGGGAAG ACCGTGTGCTGGCA TGGACTGAGCAGAT GTGGGATAGAGAGA GGCAGAAGTTAAAAA GTGGTATTTGGATA TTCCTTGGCTGGAT CTCCTGTAGCACCA TGACCTCTCTCGGT TGGAGCACAGAGG TCTGACTCCCAAG	
		TGGACTGAGCAGAT GTGGGATAGAGAGA GGC	8 P 7-1 +/-
		TGGACTGAGCAGAT GTGGGATAGAGAGA GGC	5 P 7-1 +/-
		TGGACTGAGCAGAT GTGGGATAGAGAGA	13 P 7-1 +/-



high confidence	16	GTCTTTGT AAATCTCTCTGTTA GCTCCTGTATCCCAT TTTTTGATTGGTTT TAAGAACTTCTTGA GTTCCTTTATTATA TTGGAATAGATAG ATAGATGATAGATA GATAAATAAATGGA TACTGGATGAGGG GTTAGTGGAGAT	7	P 7-1 +/-
		TAGATA GATAAATAAATGGA TACTGGAT	7	P 7-1 +/-
		TAGATA GATAAATAAATGGA TACTGGAT	5	P 10-1 +/-
		TAGATA GATAAATAAATGGA TACTGGAT	5	P 10-1 +/-
non-candidate	17	CATGGAAGG TCATGGGTCTCTGT GTCTATGGAGTGAG TCTGTCTACTGTGG GCTGATGTGTAAGGA CTCTCCTGTGCTGC ATCCCACTGAGGCCA GCAGCTTATGTTCA AGGGGACGATGATT ATGTGACATGATT TGTGACTCTGTG	7	P 7-1 +/-
		TGTTCA AGGGGACGATGATT ATGTGA	7	P 7-1 +/-
potential	18	AGCAGGAT GAGCGTCTGGTTT CTGAGCTGGAGAGT GTGTTGGGGTTTGA TTGCTTCTGATACG GGTCACCCGGACAC ATCAGTGGTAGGAC AGGACGAGTAACTC CCGACGACCGAGGA GGCGAAGGCGATC TCCTTCCTCCT	5	P 10-1 +/-
		TGGGGTTTTGA TTGCTTCTGATACG GGT	5	P 10-1 +/-
high confidence	19	GGCGCGAC TCCATGAAGCTTGTG AGTGGCCGAGGTGG GGCTGGGTGGTGGA GGCGGGAGGCCAT TGATCTATTGTGGG CTCTACTCCTGCC CCGACCGAGCACC CCATTGGCTACCCA CAGGTACACAGCA GCCAGCGTC	6	P 7-1 +/-
		GGTGGTGGA GGCGGGAGGC	5	P 7-1 +/-
		GGTGGTGGA GGCGGGAGGCC	5	P 7-1 +/-
		GGTGGTGGA GGCGGGAGGCCA	8	P 7-1 +/-
		GACCACC CCATTGGCTACCCA CA	8	P 7-1 +/-
		GACCACC CCATTGGCTACCCA CAG	32	P 7-1 +/-
		GGTGGTGGA GGCGGGAGGC	5	P 7 +/-
		GGTGGTGGA GGCGGGAGGCC	5	P 7-2 +/-
		GGTGGTGGA GGCGGGAGGC	17	P 7-3 -/-
		GGTGGTGGA GGCGGGAGGCC	11	P 7-3 -/-
		GGTGGTGGA GGCGGGAGGCCA	11	P 7-3 -/-
		GGTGGTGGA GGCGGGAGGCCAT	6	P 7-3 -/-
		GACCACC CCATTGGCTACCCA CA	22	P 7-3 -/-
		GACCACC CCATTGGCTACCCA CAG	9	P 7-3 -/-
		GACCACC CCATTGGCTACCCA C	5	P 7-3 -/-
		GACCACC CCATTGGCTACCCA C	81	P 7-3 -/-
		GGTGGTGGA GGCGGGAGGC	12	P 7-4 -/-
		GGTGGTGGA GGCGGGAGGCC	10	P 7-4 -/-
		GGTGGTGGA GGCGGGAGGCCA	9	P 7-4 -/-
		GACCACC CCATTGGCTACCCA CA	17	P 7-4 -/-
		GACCACC CCATTGGCTACCCA CAG	9	P 7-4 -/-
		GACCACC CCATTGGCTACCCA C	5	P 7-4 -/-
		GACCACC CCATTGGCTACCCA C	62	P 7-4 -/-
		GGTGGTGGA GGCGGGAGGC	5	P 10-3 -/-
			5	P 10-3 -/-
		GACCACC CCATTGGCTACCCA CA	6	P 10-4 -/-
			6	P 10-4 -/-
		GACCACC CCATTGGCTACCCA CA	5	P 14-4 -/-
			5	P 14-4 -/-
high confidence	20	GCGGCTTTT TGGTTTTGGTTTT GGTTTTGGTTTT GGTTTGGTTTTTG GGGGCAGGGCTTCT CTGTGTGACCCTGA CTGTCCTGGGAATTC ACTCTATGGAGCGG GCTGGCCTCCGACCT CATGAAGTCCACCT GCCTCTGC	4868	P 7-3 -/-
		GAGCGG GCTGGCCTCCGACCT C	2221	P 7-3 -/-
		GAGCGG GCTGGCCTCCGACCT C	1098	P 7-3 -/-
		GAGCGG GCTGGCCTCCGACCT CA	651	P 7-3 -/-
		GAGCGG GCTGGCCTCCGACCT	387	P 7-3 -/-
		AGCGG GCTGGCCTCCGACCT C	344	P 7-3 -/-
		AGCGG GCTGGCCTCCGACCT CA	286	P 7-3 -/-
		TAGAGCGG GCTGGCCTCCGA	282	P 7-3 -/-
		TAGAGCGG GCTGGCCTCCGAC	282	P 7-3 -/-
		TAGAGCGG GCTGGCCTCCGAC	187	P 7-3 -/-
		TAGAGCGG GCTGGCCTCCGA	125	P 7-3 -/-
		TAGAGCGG GCTGGCCTCCGAC C	97	P 7-3 -/-
		TAGAGCGG GCTGGCCTCCGAC CAT	94	P 7-3 -/-
		AGAGCGG GCTGGCCTCCGAC C	75	P 7-3 -/-
		AGCGG GCTGGCCTCCGACCT	55	P 7-3 -/-
		AGAGCGG GCTGGCCTCCGAC	31	P 7-3 -/-
		AGAGCGG GCTGGCCTCCGACCT CA	31	P 7-3 -/-
		TAGAGCGG GCTGGCCTCC	22	P 7-3 -/-
		AGAGCGG GCTGGCCTCCGA	19	P 7-3 -/-
		TAGAGCGG GCTGGCCTCCGACCT C	19	P 7-3 -/-
		AGCGG GCTGGCCTCCGACCT CAT	17	P 7-3 -/-
		GCGG GCTGGCCTCCGACCT CA	16	P 7-3 -/-
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		AGAGCGG GCTGGCCTCCGA	5	P 7-3 -/-
			11250	P 7-3 -/-
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		GAGCGG GCTGGCCTCCGACCT CA	724	P 7-4 -/-
		GAGCGG GCTGGCCTCCGACCT	390	P 7-4 -/-
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		AGCGG GCTGGCCTCCGACCT CA	120	P 7-4 -/-
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		GAGCGG GCTGGCCTCCGAC	96	P 7-4 -/-
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		TAGAGCGG GCTGGCCTCCGACCT	89	P 7-4 -/-
		TAGAGCGG GCTGGCCTCCGACC	75	P 7-4 -/-
		GAGCGG GCTGGCCTCCGACCT CAT	41	P 7-4 -/-
		AGAGCGG GCTGGCCTCCGACCT C	27	P 7-4 -/-
		AGAGCGG GCTGGCCTCCGACCT	26	P 7-4 -/-
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		GAGCGG GCTGGCCTCCGA	16	P 7-4 -/-
		AGAGCGG GCTGGCCTCCGAC	15	P 7-4 -/-
		AGAGCGG GCTGGCCTCCGACCT CA	15	P 7-4 -/-
		GCGG GCTGGCCTCCGACCT C	12	P 7-4 -/-
		TAGAGCGG GCTGGCCTCC	12	P 7-4 -/-
		TAGAGCGG GCTGGCCTCCGACCT C	10	P 7-4 -/-
		GAGCGG GCTGGCCTCCGA	9	P 7-4 -/-
		AGCGG GCTGGCCTCCGACCT CAT	6	P 7-4 -/-
		GAGCGG GCTGGCCTCCGACCT CATA	6	P 7-4 -/-
			3852	P 7-4 -/-
		GAGCGG GCTGGCCTCCGACCT C	6930	P 10-3 -/-
		GAGCGG GCTGGCCTCCGACCT CA	1990	P 10-3 -/-
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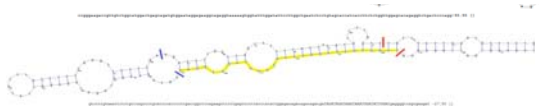
		AGCGG GCTGGCCTCCGACCT C	799	P 10-3 -/-



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460 P 10-3 -/-
449 P 10-3 -/-
413 P 10-3 -/-
331 P 10-3 -/-
324 P 10-3 -/-
299 P 10-3 -/-
114 P 10-3 -/-
110 P 10-3 -/-
89 P 10-3 -/-
80 P 10-3 -/-
79 P 10-3 -/-
43 P 10-3 -/-
39 P 10-3 -/-
22 P 10-3 -/-
22 P 10-3 -/-
18 P 10-3 -/-
17 P 10-3 -/-
14 P 10-3 -/-
13 P 10-3 -/-
12 P 10-3 -/-
11 P 10-3 -/-
9 P 10-3 -/-
8 P 10-3 -/-
7 P 10-3 -/-
6 P 10-3 -/-
6 P 10-3 -/-
5 P 10-3 -/-
5 P 10-3 -/-
14367 P 10-3 -/-

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61.44 P 10-4 -/-
2086 P 10-4 -/-
1491 P 10-4 -/-
718 P 10-4 -/-
367 P 10-4 -/-
358 P 10-4 -/-
285 P 10-4 -/-
272 P 10-4 -/-
206 P 10-4 -/-
186 P 10-4 -/-
119 P 10-4 -/-
110 P 10-4 -/-
90 P 10-4 -/-
85 P 10-4 -/-
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37 P 10-4 -/-
19 P 10-4 -/-
19 P 10-4 -/-
17 P 10-4 -/-
16 P 10-4 -/-
14 P 10-4 -/-
13 P 10-4 -/-
9 P 10-4 -/-
9 P 10-4 -/-
8 P 10-4 -/-
8 P 10-4 -/-
8 P 10-4 -/-
6 P 10-4 -/-
5 P 10-4 -/-
5 P 10-4 -/-
13822 P 10-4 -/-

non-candidate

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21 ATAGATTC TGTCGAATCAAGAA GAAATAACTGGTCA CCAGTTGCTTGTTA GTGTCTCTGGGCTA AGCAGTGCTTAATC ACATTGACTAACCT CAGCGAGTCTGTGG ATGAGTAACTCTCTA CTGGACCAAAGT TTCTGT
21 !!!!!!!!.!!!!!!.!!.!!.!!.!!.!!.!!!.!!!.!!!!!!!!!!!!!!!!.!!!!!!!!!!!!!!!!
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non-candidate	26	GCTGGGCA GCCCAGGTATAGTT AGTTTTAAGCTTGT AAGTTTACTTCCTA GTTTCTTTAACAC ACCTGATGTAAAG AACACATTGAAAT ACTGCAGGTTGCAG TTGACATACCCAC ATGGTCTGCAAAA GC	6 P 7-1 +/- 6 P 7-1 +/-
non-candidate	27	GCTGGCGT TGTGGTGGGCGGCA GGTGGGATCTTGAG TAAATGGTTGCGCT TCCCCTCTACAGGA CACAGAATCTTCTT GGGGAAGAGGGTCG TCGGATCAGAGAGT TGACCGCAGTTGTC CAGAAGCTCTTTG GC	11 P 7-1 +/- 8 P 7-1 +/- 6 P 7-1 +/- 25 P 7-1 +/-
potential	28	AATACAAT GGTAGCCAGATGAC CACTGACTGTCATC TTTTCTGTGGTGAC ACTGGGCGTGCTGG GCCGCTGGTGAAGC CTGCTCCGACGCT GTCACCTGGATGA GTGCAGTGGTAGGC AGATGACCACTGA CT	5 P 7-1 +/- 5 P 7-1 +/- 10 P 7-1 +/- 5 P 10-1 +/- 5 P 10-1 +/-
non-candidate	29	AGAAAACT CCTCACACACTTGC TTGGCAGGGGAAAG TCCATGATCGAAGA GCTGGTCTTCCTG GGTAATGCTTATTC TTTGCAGTCTGGAT GTACTTGACTGGAT AATTTTTGGTAGTG GGGGAATGTATTC T	12 P 7-1 +/- 5 P 7-1 +/- 17 P 7-1 +/- 22 P 10-1 +/- 22 P 10-1 +/- 8 P 10-2 +/- 8 P 10-2 +/-
high confidence	30	GACATTCT GGATTTTGGTTGTT TGTTTGTTGTTTG TTTGTTTGTTTTGA GACGAGGTTTCTCT GCATGACCTTGACT GTCCTGGAACTCAC TCTGTGAGCGAGGC TGACCTCGAACTCA GGAATCCACCTGC C	5 P 7-1 +/- 5 P 7-1 +/- 5 P 10-2 +/- 5 P 10-2 +/-
high confidence	31	AATATTAC TGTGGGGCCACCTT CTCTCAGCAGCTGG CATCTGTACTTTGTG GTATATCTGGCACT GCCGAGTGGTGCAG GACTTCCCAGAGTG CAGTGAGCAGTGTG GCGACTACTGATCC TTTCCTCTGGTGC T	9 P 7-1 +/- 6 P 7-1 +/- 6 P 7-1 +/- 21 P 7-1 +/- 16 P 10-1 +/- 8 P 10-1 +/- 24 P 10-1 +/-
high confidence	32	TCTGCACT GGTAATCTTGGGTT CTACGAAGAGGCAG TCTGAGCAAGCCAG GGGAAGCAGCCAG TAAAGAAACATCCC TCCGTGGCCTCTGC ATCAGTTCCTGCTT CTTGACCTGCTTGA GATCCAATCCCGA	7 P 10-1 +/- 7 P 10-1 +/- 5 P 10-2 +/- 5 P 10-2 +/- 5 P 14-1 +/- 5 P 14-1 +/-
potential	33	AATTCCAC AGTGCCAGATAACC AAGAATGATCTTTT AACTGGAATCTGTA CCCTGAAGGGAAAT TGATCACAGTGCTC TGGGTCTGGAATGT TTCTCAACCATTAG TTGATGCCAGAATT CTCACTGGGAACT	7 P 14-1 +/- 5 P 14-1 +/- 5 P 14-1 +/- 17 P 14-1 +/-
high confidence	34	GCTGCAGG CCAGTACAAACACA GGTGGAACTGGAAC AGGGACAGAGGAAC TCAGGTGAGGAACG TGGCCATTCTTGTA CTCGCAGCTGAGGC TCTTGGCCTCCCTG GGTTGAGAACATTG GTAATGAAAC	31 P 7-1 +/- 11 P 7-1 +/- 8 P 7-1 +/- 50 P 7-1 +/- 17 P 10-1 +/- 11 P 10-1 +/- 28 P 10-1 +/- 9 P 10-2 +/- 8 P 10-2 +/- 17 P 10-2 +/-
high confidence	35	CTTTCCTG TGAGATTATGTAC TGTGCACCAGCCG GCAGAAGACACTGG GAGGCTCGTAGTG GTCACTGAATCCCA GACGTCAGCTTCAC CCATTGCAGGGTG CATGAGAAATAG TCTTGGGATGG	10 P 7-1 +/- 10 P 7-1 +/-

high confidence	36	GGAGCAAG TGGTGAAGCGGCAG GATCCTTCCATTGT CAGCGAACTGTGGT GCACGTTCCATGAC AAGAGCATGGTGGA AGGAGCCTTCCAGA AGACACTGAGCGAC CTGCAGCTGGACTA CCTGGATCTCT	7 P 7-1 +/- 7 P 7-1 +/- 5 P 10-1 +/- 5 P 10-1 +/- 6 P 10-2 +/- 6 P 10-2 +/- 5 P 14-1 +/- 5 P 14-1 +/-
high confidence	37	CAAGCTGT AATAAGAACTTGCC CAATAATACTGGAC ATAGCGTGGAAACC AGAGCAGGGTGGCT AGGATTTAAACCCT CTCTGTGATCTTTG TTTTTCAGTCCCAG TGTGTGATTTGATG TGTGAACTTG	48 P 7-1 +/- 48 P 7-1 +/- 19 P 10-1 +/- 19 P 10-1 +/-
high confidence	38	GTATACGA ACTGCTGACTCTTT CTGGCTTTGCCTTC CCTCCATTCTCCTG GGGATGCTACTCCC TTTGTCTTGGATGG TTCTCCCGGAAGCT GCTGGGGGACAGCA TGGGAGAAACTGG GGCCTGTGTC	18 P 7-1 +/- 10 P 7-1 +/- 28 P 7-1 +/- 31 P 10-1 +/- 31 P 10-1 +/- 5 P 10-2 +/- 40 P 10-2 +/- 45 P 10-2 +/- 7 P 14-1 +/- 7 P 14-1 +/-
high confidence	39	GGCGCCCT TTGAGCCTGACCTG AAGGACAGGATGGA TGGAGTGACTTTG AGACCACTGGAGCA CGGAGCTTAAAAG CAAGTTGACTCCCA TTCTCTTTTACTAT GATTGTGACCTTGG GATCTCGTC	7 P 7-1 +/- 7 P 7-1 +/- 8 P 10-1 +/- 8 P 10-1 +/-
high confidence	40	GCCCTCGG GCTAAAGGAAGGAA GGAAAGGATCAATG GATGCCCTCGAGCAT GGGCTGTGTGTTCA GCATGACTGGCTTC TCTCCTGGACTGGT CTTTCTGATCTCC TCTGCCTTTAATT ACCCTGGGC	11 P 7-1 +/- 6 P 7-1 +/- 5 P 7-1 +/- 22 P 7-1 +/-
high confidence	41	GGACTGTT TTATGCCATGAATT GTTTTGTGTGTGTG GTTTCAAGTATCTG GGACCAGTTGCTCA TCGGCTCTGAAACCT CATCCCAGAAAAC CTCTGACTTCGAA CAGTTCCGGATGCAG AGGAGCCC	6 P 7-1 +/- 5 P 7-1 +/- 11 P 7-1 +/-
potential	42	TCTCGGCT GGTATCCTTGAGTT TTATAAGAGGCGA GCTGGCGAGGCAG GAGGGCGAGCCAG TAACATCCTCCAT GACTCTCTGCATCG CTCCTGCTCCCTGA CCTGCTTGAGTTCC ATTTCTGA	5 P 10-2 +/- 5 P 10-2 +/-
high confidence	43	ATGGTTCC AGATCTGTGGGAGT CCCTTTTCTGGGTA ACCAGCCTGGCTGG CCCCGGGGCCTACA TACCTCGATCCCAG ACCACATGGGAACT GCTCCTTTGAAAA TTCACTTGCAGACT GGACTGT	5 P 7-1 +/- 5 P 7-1 +/- 5 P 10-2 +/- 5 P 10-2 +/-
high confidence	44	CTTGGTCT AGATAGTTTTAAGA CAGCCAGCAGTATG TAGAGAAGCCAACC ATAAAAGAAAAAA TTGGAAGGTAATTT TAAAAAGTGTGCCA AATGGTAAGTTAGG AACATCTTATTTAG AACCAGG	6 P 7-1 +/- 6 P 7-1 +/-

potential 45 GACCCAGT GTCTCTGAGAGAA TGTCTGCTGCTCCAG GGCATGCTGTGTGT GGGGCAGGTGCTGG GCATCTGATCACA GGCGAAGCCGATTA GGAAGAGCAGCTC CCTTTTATGAGCCA GGTC

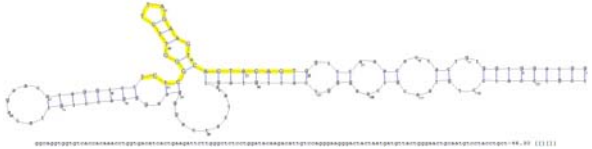
6 P 10-1 +/-
6 P 10-1 +/-

potential 46 TCTTCAGT TCCCCATGTTCAGT CTTGCGACCCCGAC ATTTCCTGAGTCGG ACCCTGTTGCCTTT CCTGCACTGGGACC TGTCGAGATGCTAGT TTGCCTTTCAGATG GATGTGGGGGGGG GAAGA

6 P 7-1 +/-
5 P 7-1 +/-
11 P 7-1 +/-

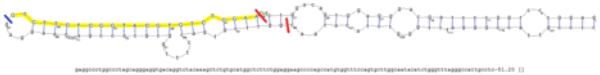
non-candidate 47 GGCAGGTG GTGTCACCGACAAC CTGGTGACATCACT GAAGATTTCTTGGGC TCTCCTGGATACGA GACATTGTCCAGGG AAGGGACTACTAAT GATGTTACTGGGAA CTGCAATGTCCTAC CTGCT

16 P 14-1 +/-
9 P 14-1 +/-
9 P 14-1 +/-
34 P 14-1 +/-



non-candidate 48 GAGCCCCT GGCCCTAGCAGGGA GGTGACAGGTCTAC AAAGCTCTGTGCAT GGCTCTTCTGGAGG AAGCCCCAGCCATG TGGTTTCCAGTGCT TGGCAATACATCTG GGTTTAGGGCCATT GCCTC

8 P 7-1 +/-
5 P 7-1 +/-
13 P 7-1 +/-

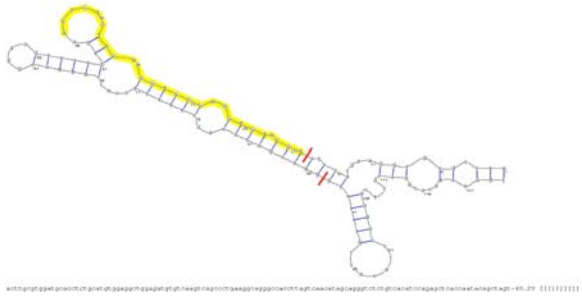


5 P 10-2 +/-
5 P 10-2 +/-

non-candidate 49 ACTTTACCT GGATGCACCTCTGC ATGTGGAAGCTGGA GATGTGTCGAATCA GCCCTGAAGGCAGG GCCGCCTTAGTCGA CATGACGGGGTCTC TGTCCAGTCCGAGG CTCACCGATACGGC TGGT

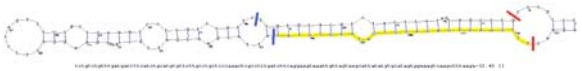
6 P 7-1 +/-
6 P 7-1 +/-

5 P 10-1 +/-
5 P 10-1 +/-



potential 50 TCTGTCTCG TTTGATGAGTTTTCA TCTGCATGTGTTCT TGCCTGCTCCCAAA CTCGCCCTTTGATCT TCAGGAAGTAAATT GTTAGTGAGCATTA TATGTGCATAGTGG AAGGTCAGCTTTA AGA

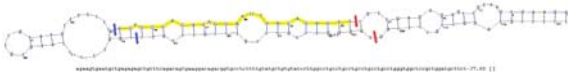
8 P 7-1 +/-
8 P 7-1 +/-



high confidence 51 AGAAGTGA ATGCTGAAGAGACT GCTTCAGACAGTGA AGGACAGACGTGC CTCCTTTGTATACT GTGTATCCTTAGCC TGCCTGCCTGCCTG CCTGCCTGGGTGGC TCCGCTGGATGCTT CT

6 P 7-1 +/-
6 P 7-1 +/-

5 P 10-1 +/-
5 P 10-1 +/-



non-candidate

52 CGAGCTGA GTCTGACTTTCACA GCCCATGCTGTCAT CTGTGCACAGATG GGTGTGAGTGACGTC CTGCATGCACTGAC GGTGCAGGACGTGG GATGGTGACTGGGA AGTGAAAGCTCCTTT TG

potential

53 CTCCGAGC ATGTTTGTTTGTG TACAGGTCCTGGGC ATCTCCGTTCCGG TCGAGTTTGACAAA GCGAGCCAGCCGG CATGGGAAAACTGG GCCTGAGCTCGGGA AAGGGTGCAGCCA G

high confidence

54 GGTGTCTG TGTCCCTGTGAATG GAAAACGAGTTGAA CCTATTTATTAGTA TTTCATCTAACCCT AAAGTTTGGAGATT CTTTAAAGGTTTGA CGTTGGTGGGCCAG GCTCCAGAGGCCCC

high confidence

55 GAGGGCAT TGGATCCCCTGGAA CTAGGATTTACAGT TGTGAGCTGCCATG CAGGTACTGGGAAT TGGACCTGGATCCT CAAGAAGGCAGCC TGTGCTCTTAACCA CTGAACCATTTCTC

potential

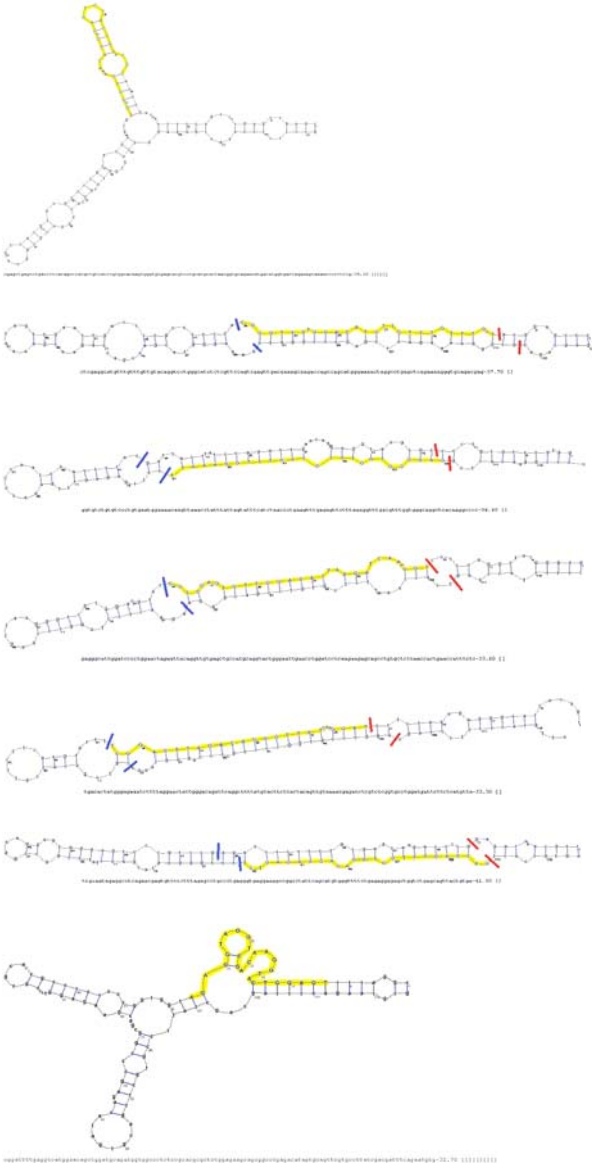
56 TGACACTA TGGGAGAAATCTTT TAGGAACTATTGGG ACAGATTCCAGGCT TTATGTACTTCCTA CTACAGTTGTGAAA TGGAATCTCGTCTC GGTGCCTGGATGAT TCTTCTCATGTTA

high confidence

57 TTGCCAATA GAGGCCTCGAGACC ACTGTTTTCTTTAG ACCCTGCCCTGAGG GTGAGGAAGCCGG CCTATTCAGCATGT GGGTTTTCTGAGAG GAGAGCTGGTCTGA GCAGTTACTGTGA

high confidence

58 CGGATTTT GAGGTCATGGAACA GCTGGATGCAGATG GTGGCCCTCTCCGC ACGCCGCTCTGAGA AGCAGCGCCCGAG ACATAATGCAGTTC GTGCCTTATCGAGG ATTTCGAGGATGTG

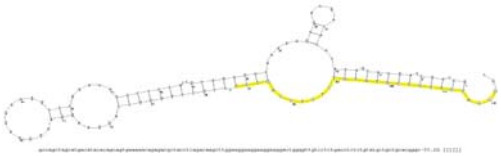


non-candidate

59 GCCAGCTA GCATGACATGACA GCAGTGAAAAACAG AGACGCTACCTCAG ACAAGCTTGGAAGG AAGGAAGGAAGAC TGGGGTTGTCTCT GACCTCTCTGTATG CTGCTGCACGGC

7 P 7-1 +/-
7 P 7-1 +/-

14 P 10-1 +/-
8 P 10-1 +/-
22 P 10-1 +/-



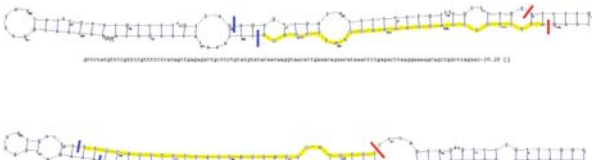
high confidence

60 GTTCTATG TTTTGTTTTGTTTT TTCATAACTGAAG ATTGCTTCTGTATG TATACAATGAGTA ACATTGAACAGAA CATAAACTTTGGA CTTAAGGAAAACA GCTGACTTAGAAC

18 P 7-1 +/-
5 P 7-1 +/-
23 P 7-1 +/-

12 P 10-1 +/-
6 P 10-1 +/-
18 P 10-1 +/-

13 P 10-2 +/-
6 P 10-2 +/-
19 P 10-2 +/-



potential

61 AGACTTGT CCTGCAGATGACCC TCTCTAAGCACGAG GAGTCTCCAGGTTT CCAGCAAGGGCAGA AACCGTGTGTGTAG GCCTCCTTGTGTAC ACAGAAAAGATAT CCAGGCCAAGCCT

8 P 14-1 +/-
8 P 14-1 +/-

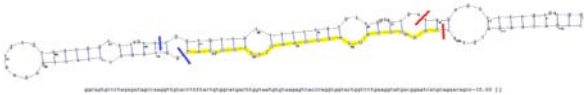
high confidence

62 GGCAATGT TCTAAAAATAACCA AAGTTGTACCTTTT ACTGTGGCATAACT TGATAATGTGTAAG AGTTACCCCAGTGG TACTGGTTTTAAG GTATGACCGGAATCA TGCAAACAGCC

10 P 7-1 +/-
5 P 7-1 +/-
5 P 7-1 +/-
20 P 7-1 +/-

6 P 10-1 +/-
6 P 10-1 +/-

5 P 10-2 +/-
5 P 10-2 +/-
10 P 10-2 +/-

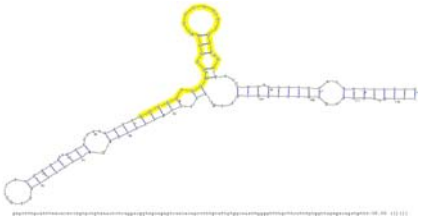


non-candidate

63 GAACTTTG CATTTAACACACCA GTGCTGTAAACCCT CAGGACGGTAACAG AGTCAACACACCT TTGCATTGTGCCAA ATTGGGGTTTTGCT TCCTTTGTGTTAG AGACGAGTGTTT

6 P 7-1 +/-
6 P 7-1 +/-

5 P 10-2 +/-
5 P 10-2 +/-

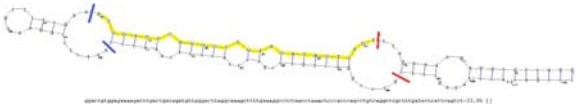


potential

64 GGACTGTG GAGAAAAGATTTGA CTGATGATGTGTGG GACTTAAGCCAAAC TTTTGAAAGGCCTC TAACCTAACCTCCC ACCCAACCTGTCAG GCCCGCTTTGATAT TCATTCAGTCT

9 P 7-1 +/-
9 P 7-1 +/-
5 P 7-1 +/-
23 P 7-1 +/-

8 P 10-1 +/-
7 P 10-1 +/-
5 P 10-1 +/-
20 P 10-1 +/-



high confidence

65 GCCTGTGC AGTCCTGGTTTTAT GACATGGCAGATAC AGAGTTGCTGAACC TGATTCCAGTCTTC GAGGAGCTAAGTGG AACTGATGATGTCT ACACCAGCCTTGGG CAGCTGCGGGC

8 P 7-1 +/-
8 P 7-1 +/-
5 P 7-1 +/-
21 P 7-1 +/-

potential

66 AGAATGAG ATGGGAGGTTTCTG GGAAAGGCATCTGA TTCTCATCTCCTGC TCCGACCGGCGAGG GAGGGCCGGGGAGA GAGGGTGTGGAGTG ACAGAAGGACTGTT CGCTCATTCT

9 P 7-1 +/-
9 P 7-1 +/-

8 P 10-2 +/-
8 P 10-2 +/-

high confidence

67 GTATCTAT TAACTAGAGAACTG GTCAGGTCTGAAGT GGGATCCTGAGGAC TGTGATGTATCACT GGACATCATTTCA TGTCCTGAGCATG CTTCTTCATATTAA AGATAGAAC
..(.(((((.((((((((.(.(((((.(.(.(.(.....(.(((.....(((((.).(.(((.(((.(.(.((((((((.(.(.(((((.(((((.(.(((((((.
******* TAACTAGAGAACTG GTCAGGTCTGAAGT **
..... TAACTAGAGAACTG GTCAGGTCTGAAGT .....
..... TAACTAGAGAACTG GTCAGGTCTGAAG. .....
..... TAACTAGAGAACTG GTCAGGTCTGAAGT G .....
---

high confidence

68 GATTCCGA ATCCAGAAATGACA AATGACAAGTTTTC TGGTGTCCCTTGCGG TGGTGACCCTTTGA GGATGGAATTGAGA ATAATGTGATGGGT CTGACCTGTGACTT TATGGATC
((((((((.((((((.(.((((.(.((((((((((((((((((((((((((((((((((.(.(((.((.((((((((.(.(((.((.((.(.(.(.((((((((.
******** **TGA GGATGGAATTGAGA ATAATGTGATGG**********************
..... TGA GGATGGAATTGAGA ATAATGTGATGG. .....
---

high confidence

69 GGGGAATT GAATATGTCTCACTG CCTTGGGTGCACTG GAGGGACAGGGACCA AAAGTCGAGGGTCC CAGGCTCCCTTTGA TACAAGGTGAACAG TAGACCATTATGTAG ATGTCCCT
((((((.((....((((((((((((.((((((.....((((((((.(((((.....((((((((((.(((.(((.....(((.).(((((.....(.(.(((((
********** **TGA TACAAGGTGAACAG TAGACCATTATGTAG**********************
..... TGA TACAAGGTGAACAG TAGACCATTA. .....
..... TGA TACAAGGTGAACAG TAGACCATTAG. .....
..... TACAAGGTGAACAG TAGACCATTATGTAG .....
..... TACAAGGTGAACAG TAGACCATTATGAG A .....
..... TGA TACAAGGTGAACAG TAGACCATTA. .....
..... TGA TACAAGGTGAACAG TAGACCAT. .....
..... TACAAGGTGAACAG TAGACCATTATA. .....
..... TTTGA TACAAGGTGAACAG TAGACCAT. .....

....
..... TGA TACAAGGTGAACAG TAGACCATT. .....
..... TGA TACAAGGTGAACAG TAGACCATTA. .....
..... TGA TACAAGGTGAACAG TAGACCAT. .....
..... TGA TACAAGGTGAACAG TAGACCATTAG. .....
..... TACAAGGTGAACAG TAGACCATTATA. .....

..... TGA TACAAGGTGAACAG TAGACCATTAG. .....
..... TGA TACAAGGTGAACAG TAGACCATT. .....
..... TACAAGGTGAACAG TAGACCATTATA. .....
..... TGA TACAAGGTGAACAG TAGACCAT. .....
..... TGA TACAAGGTGAACAG TAGACCATTA. .....

..... TGA TACAAGGTGAACAG TAGACCATT. .....
..... TGA TACAAGGTGAACAG TAGACCATTATA. .....
..... TGA TACAAGGTGAACAG TAGACCATTAG. .....
---

high confidence

70 AACCTAAG CTCCTTCCCGATTT TGGGGGTTTGTTT TTTTAAATCCCTTA GGGGTATTCTCTGG TGTTTTAGGGACTG GTGACCTTTAACCG CTGGATTGGGGGG GAGGGATT
((((((.. ((((((((((((((((((((((((((((((.....((((((.(((((.(.((((.....((((((((((((((((.(((.....((((((((((.(.(((((.(((((((.(.((((((
********* **TAAGCG CTGGATTGGGGGG GAGGA****
..... TAAGCG CTGGATTGGGGGG GAGGA. ...
..... TTAGCG CTGGATTGGGGGG GAGGA. ...
..... TTAGCG CTGGATTGGGGGG GAGG. ....
..... TAGCG CTGGATTGGGGGG GAGGAG. ...
---

potential

71 GAGATGCT GTGTTACGTGTGCT GGAGGATGAGGTAA GGAGTGATCCCATCG GCTGAGTGTTTTCC CACTGTGCTGACAC TCACATTGCTGACA GTGCACGTTTTCAC AGCACCTC
((((((((.(((.((((((.(.((.(.((((.(.((((((.....((((((.(.(((((.....((((.(.((((((((((.(.((.(.((.(.((((((.(((((((((
********* ************OCT GGAGGATGAGGTAA GGAGTGA**
..... OCT GGAGGATGAGGTAA GGAGTGA. .....
..... OCT GGAGGATGAGGTAA GGAG. .....
..... OCT GGAGGATGAGGTAA GGAGT .....
..... C CACTGTGCTGACAC TCACATTGCTGACA .....

....
..... OCT GGAGGATGAGGTAA GGAGTGA. .....
..... OCT GGAGGATGAGGTAA GGAG. .....
..... C CACTGTGCTGACAC TCACATTGCTGACA .....

....
..... OCT GGAGGATGAGGTAA GGAG. .....
..... C CACTGTGCTGACAC TCACATTGCTGACA .....
---

high confidence

72 TCTGGAATT AGGATGAAAGTGGT AGAGCTTGCGTATT TAATCTGGCCTTTT GTGGCAGTGTTTGAA AAGGATATGAAGTG CATATTAAGCCGAA CCGAGTTTTTTTCTC TCCCAGA
((((((.. ((((.((((((.(.((.((((.(.((((.(.((((((.(.((((((.(.((((((.(((((((((.((((((((((.(.((.((((((((.(.((((((.
******** ****TGGAAGTGGT AGAGCTTGCGTATT TAATC**
..... TGGAAGTGGT AGAGCTTGCGTATT TAATC .....
---

potential

73 GATGTGTC TTCAGCCCCTTGCC ATGGGATCTTAATC ATGCAAGTGAGTTT TTTGAAATGCAGAT TCTCCACCTGCTGCC AGCTTCCTGGATCT GGCACTGTGTTCGA GGCCACC
((((.((((.(.((((((.(.((.((((((.((((.(((((((((((((((((((((((((((((((((((.(((((.((((((.(.((((.((.((((((((
******** **TTGGATCT GGCACTGTGTTCGA GGC******
..... TTGGATCT GGCACTGTGTTCGA GGC. .....
..... . TTGGATCT GGCACTGTGTTCGA GGCC. .....
---

high confidence

74 CACGAAGC TTCCCTGCCTACCA TCCTCTGACTGATG GTCTCTCGAGATGGC TCAGGACAGGCCAT GGGCACTCTTGGGG CCAGGTCAGCCCTA GGTGGCTGGCAGGG CAGAGTG
.....((((((((((((.(((.((((((((((.((((.(((.((((((.(((.((((((((((((((.((.((((.(((.((((((((((((((.((((((.((((((.((((.
******** ************** ****TGACTGATG GTCTCTCGAGATGGC TCA**
..... TGACTGATG GTCTCTCGAGATGGC TCA. .....

....
..... TGACTGATG GTCTCTCGAGATGGC TCA. .....
---

13 P 14-1 +/-
8 P 14-1 +/-
5 P 14-1 +/-
26 P 14-1 +/-

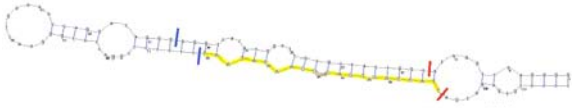
8 P 14-1 +/-
8 P 14-1 +/-

34 P 7-1 +/-
20 P 7-1 +/-
17 P 7-1 +/-
11 P 7-1 +/-
10 P 7-1 +/-
9 P 7-1 +/-
5 P 7-1 +/-
5 P 7-1 +/-
111 P 7-1 +/-

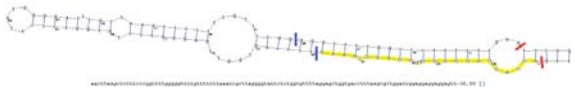
31 P 10-1 +/-
19 P 10-1 +/-
16 P 10-1 +/-
15 P 10-1 +/-
12 P 10-1 +/-
93 P 10-1 +/-

9 P 10-2 +/-
8 P 10-2 +/-
8 P 10-2 +/-
7 P 10-2 +/-
7 P 10-2 +/-
39 P 10-2 +/-

9 P 14-1 +/-
8 P 14-1 +/-
7 P 14-1 +/-
24 P 14-1 +/-



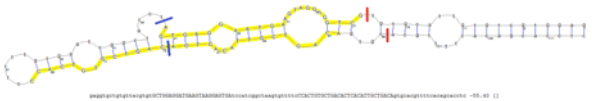
15 P 7-1 +/-
12 P 7-1 +/-
11 P 7-1 +/-
8 P 7-1 +/-
46 P 7-1 +/-



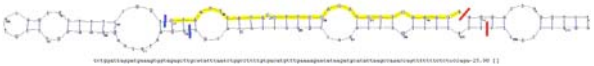
21 P 7-3 -/-
8 P 7-3 -/-
5 P 7-3 -/-
5 P 7-3 -/-
39 P 7-3 -/-

18 P 7-4 -/-
7 P 7-4 -/-
5 P 7-4 -/-
30 P 7-4 -/-

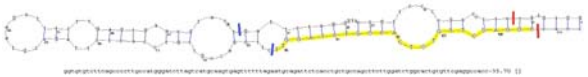
7 P 14-4 -/-
5 P 14-4 -/-
12 P 14-4 -/-



7 P 7-1 +/-
7 P 7-1 +/-

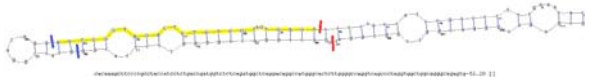


5 P 14-1 +/-
5 P 14-1 +/-
10 P 14-1 +/-



5 P 10-1 +/-
5 P 10-1 +/-

10 P 10-2 +/-
10 P 10-2 +/-



potential

75 GCCGGTTG TGAGTGACGATGAC AGTGAGGAGGAACA GGAGGAGTGAAGAG CGCTGCAGCCATCC TCGACTTGAGCGAT CCCATGTCCAGGCC ACTCTGACGCACAA CTCGGC

high confidence plus star

76 TGTGTTAC CCATCGATGAGCAAT GGCACATTTATTTC TTTGGTCATGTCTA CTGTCCATGCAGAC AGTGCTGTGAAGCG CTGAGCCGATGAGG TACTGGTTGGGAAC TGCGCA

high confidence

77 GCCCTGAG CCTTGATGCAGGAT GTACTGTGAGCAGA TGATGGGCCGGGCA TCTCCATGCTGCCT GTTCCCTTCACCTT GATCTCTGTGATTT TCTGTGAGTGATTTC TGTGGC

high confidence

78 TCTGAAGA CTTAAAAGTCCTCA ACCAGGGCTCTGGC ATCTGGCGATGGCA TTTCTTTATGTGAC ATCCCATAGCTAAA GGCAAAAGTTGGG GACTGGGTTCAGTT TTTGGA

high confidence

79 ACTGTCTG TCTTTGAATTCTGAA GGGGAACCAAGCCG GTGGGACCCTCCGA TGAAACAAGGACCC AGCCGGTTTGATGT CAGTTTCCCAAACA GTGTAATTAAGAGA GACAGT

potential

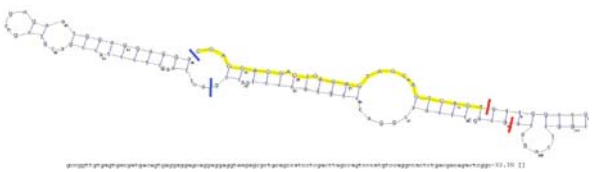
80 GCTTTTCC CACTTTTCTCCTCTG TAAGTTTCACTGTC TCTGGTTTTATGTG GAGTTCCTTGAGTT ACTTGAGACTTGAGC GTTGTACAGGAGA TAAGAATGGGTCAA TTGGC

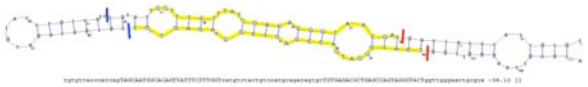
potential

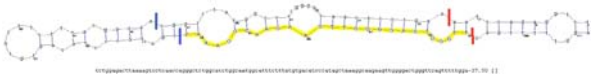
82 GAATGCTG CAAGAATCCAGATA GAAAATCCCTCCAT CAATGACAGGTGAA GACGTGTCGAATTG ACTGTAAGATGGT GATCCTCAGCTCCC GGATGTCTGTTCA AATTC

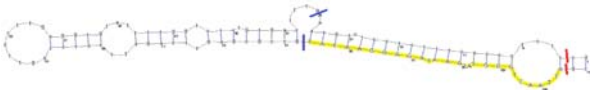
non-candidate

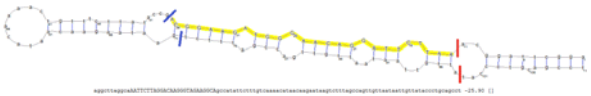
83 TTCCTGTG TGCTCACCCAAGGG GAACCTGTGTCTAT GTTGGCTTTGAGTG AAATATCCTAAAAC TCGAAATAGCACTC AGGCTCTGGAAGTC TCGATGATGCACAC ATGGG

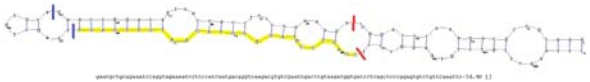




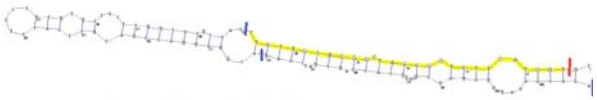


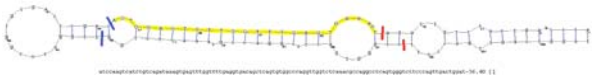


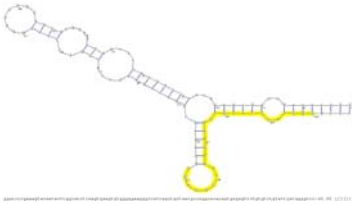


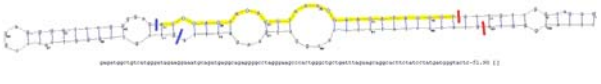


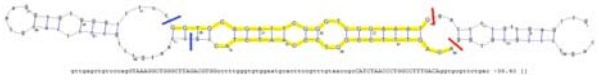
high confidence	84	TGTGGTAC TTCTGGCCATCCGC ATGTTCTT	6 P 10-2 +/- 6 P 10-2 +/-
high confidence	85	ATCCAAGT CATCTGTCAGATGA AGTGAGTTTGGTTT TGAGGTGACGCTC AGTGTGACCCCAGT TGGTCTCGAAACGCC AGGCCTCGATGGGT CTTCCCAGTTGACT GAAT	9 P 7-1 +/- 9 P 7-1 +/- 6 P 10-1 +/- 6 P 10-1 +/- 10 P 10-2 +/- 10 P 10-2 +/- 7 P 14-1 +/- 7 P 14-1 +/-
non-candidate	86	GGATCCCG AAAGTACAATACTT GCCATCTCAGATGA AGTGTGGGGGAAAG GCCATCAGCTGCTA ATGCCAAGCACACA GTGAGAAGTTCTGTG TCTGTATTGATGGG GTCC	10 P 7-1 +/- 10 P 7-1 +/- 5 P 10-2 +/- 5 P 10-2 +/-
non-candidate	87	AAAAATGC AGAGCAGAGCCTCA GTGACCTGAAACTC TGTGCACCTGGCTG GCACGACTGCAGT CCAGGTTGGGTGGT TCTGGTCTTGTGTA GTTTGCCTCATCAC TTCT	7 P 10-1 +/- 7 P 10-1 +/- 11 P 10-2 +/- 7 P 10-2 +/- 18 P 10-2 +/-
high confidence	88	GAGATGGC TGTCATGGGATAGA AGGAAATGCAGATG AGGCAGAGGGCCT AGGGAAGCCCACTG GGCTGCTGATTTAG AAGCAGCACTTCT ATCCTATGATGGGT ACTC	39 P 14-1 +/- 21 P 14-1 +/- 10 P 14-1 +/- 9 P 14-1 +/- 8 P 14-1 +/- 6 P 14-1 +/- 5 P 14-1 +/- 98 P 14-1 +/-
non-candidate	89	GTTGAGCT GTCCCAGGTAAAGG CTGGGCCTTAGACGT GGCCTTTGGGTGTG GAATGCACTTCCGT TTGTAACCCCCATC TAACCCTGGCCTTT GACAGGTGCGTTCT GAC	1954 P 7-4 -/- 346 P 7-4 -/- 83 P 7-4 -/- 5 P 7-4 -/- 2388 P 7-4 -/- 370 P 10-1 +/- 154 P 10-1 +/- 11 P 10-1 +/- 5 P 10-1 +/- 540 P 10-1 +/- 895 P 10-4 -/- 338 P 10-4 -/- 48 P 10-4 -/- 5 P 10-4 -/- 1286 P 10-4 -/-
potential	90	GGTGGGGG GTTTGGAGAGTTAA AATTTGGTATTGAG TAGCATTTATGTCT AACAAGCATGAATA ATTAGCCTTAAGTG ATTGGGTTTTGCGG ACTAATGATTCTTC ACC	5 P 7-4 -/- 5 P 7-4 -/-
high confidence	91	CTGATGGA GTTGAAGCTGTAAA CAAACCACCGGGGA CTGCGGCTTTCAGT TAAAGGTCACTGTT TGCTGTTTGTCCTC CCAGGAGTGGTTTT GGCCAACATCTCCT CAG	7 P 7-4 -/- 7 P 7-4 -/- 5 P 10-4 -/- 5 P 10-4 -/- 5 P 14-3 -/- 5 P 14-3 -/-

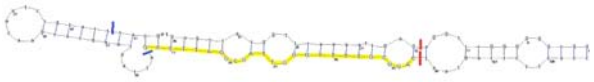


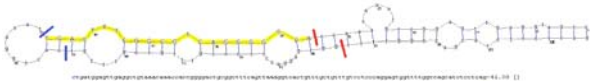












high confidence

92 GCTCTCGT CTACATCTGGCTCC ACTCTCTCATTGGC TGTCTGCCGCCCCT ATTTGGTTGGTCAT CGGTGGAGTTTGAT GAGTTCGAGTGGAT GTGTGTGGCCCGCGT GGC

potential

93 CTTGGCCA AGTATGCTGGCCCT GTGGCTGGTCTCTCCT GGACCGGTGCGGGG TGTTCCGGGGCCGC CTGTTCCGGAGGGC TTGTGTGTTCCGCC AGGGCTGCTATGTC AAG

high confidence

94 CTGCCGGC TAGAGTCTGGCTGGA ATGATGGCATGGGA GCCGGCGACTTTTC TGTCCGAGGGCTGC ACTGGCTGCCATG AGCTGTGGGGGCCT GGTGGGTGATGCGG CGG

potential

95 TTCTGTCA TTCTGCTCTGTTCT TTCCTCTGGAATGT CTGTATGCGGACCA CATCGCCCTGATCA TAGGACTTCTGGGG AAGGTGCCTCCGCA GCTCATTTTGGCGG GA

high confidence

96 GATGGGGG CTGGCTTGGTTCCT CTTGGGACCTCCTT GTTGTCCTGGGGCA GAGTTCCTGGGTGA TCTTGGATTTTGCTG TGTGGGGGATGGCT CCTGGTTTTTCGCA TC

high confidence

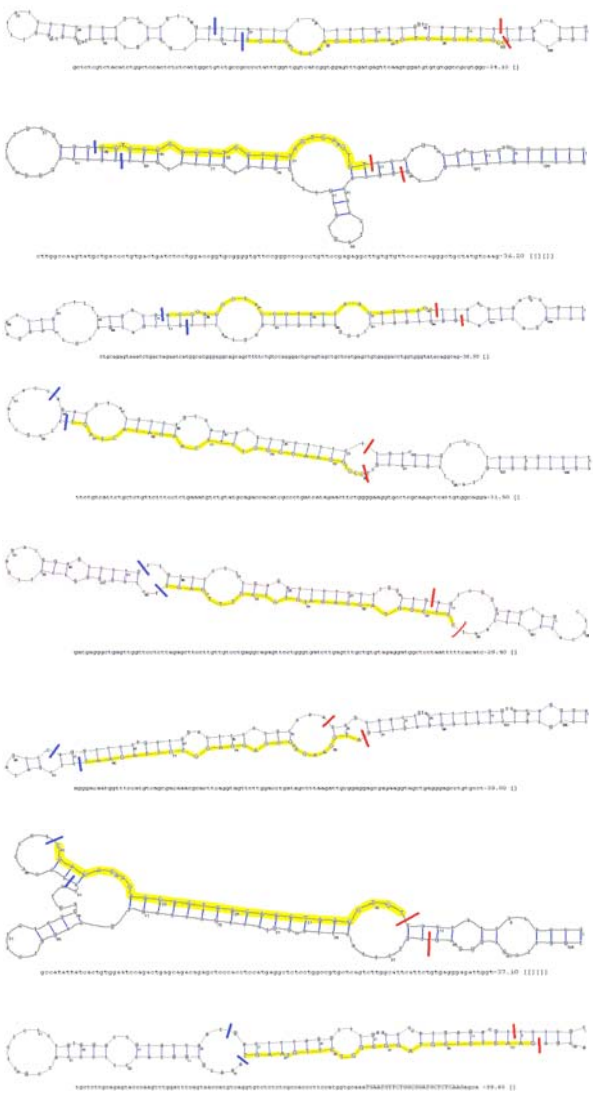
97 AGGGGCGA TGGTTTCCGATGTCA GCGGCGAAGCGCGCT TCGGCTGGTTTCTTG GGCTGGATGGCTTT AAGGTTGCGGGGGA GCGGGAAGGTGGCT GAGGGGGCCTGTGC CT

non-candidate

98 GCCGTATT ATCGCTGTGGGATC CAGGCTGGGCGGGC GGGCTCCCGCCTC CATGGGGCTCTCCT GGCCGTGCTCGGTC TTGGCCATTCATTCT GTGGGGGGGATTGG T

high confidence

99 TGCTCTTG CAGGGTGCCCGGGT TTGGGTTTCGGTGA CCATGTCGGGTGTC TCTCTCGCCGCCCT TCCATGGTGCGGGT GGATGTTCTGGCGG ATGCTCTCCAAGGGC A



high confidence	100	GCTGGACA AGCTGATTGGAAGGA ACACGCCGCCCCC CTGGCAGCGAGCC CTCGGTGTCTCTGC CCCTTTTGGGATTG TGGTGGCATTTCTC GGAGCTTGTCACGG C	46 P 7-1 +/-
		(((((((((((((.((((.(((.(((((((((((((.....(.(.(((((((.((((((((.(.((((.... .((((((((((((((((((((.((((	24 P 7-1 +/-
		TGGGACA AGCTGATTGGAAGGA ACACGCCGCC	12 P 7-1 +/-
		. . TGGGACA AGCTGATTGGAAGGA ACACGCCGCC.....	9 P 7-1 +/-
		. . TGGGACA AGCTGATTGGAAGGA ACACGCC.....	34 P 7-1 +/-
		. . TGGGACA AGCTGATTGGAAGGA ACACGCCG.....	6 P 7-1 +/-
		. . TGGGACA AGCTGATTGGAAGGA ACACGCCGC.....	6 P 7-1 +/-
		..... TGGGATTG TGGTGGCATTTCTC GGA.....	137 P 7-1 +/-
		..... TGGGATTG TGGTGGCATTTCTC GGAG.....	
		..... TGGGATTG TGGTGGCATTTCTC GGAGC.....	
		.....	
		. . TGGGACA AGCTGATTGGAAGGA ACACGCC.....	22 P 10-1 +/-
		. . TGGGACA AGCTGATTGGAAGGA ACACGCCGCC.....	19 P 10-1 +/-
		. . TGGGACA AGCTGATTGGAAGGA ACACGCCG.....	14 P 10-1 +/-
		..... TGGGATTG TGGTGGCATTTCTC GGA.....	79 P 10-1 +/-
		.....	24 P 10-1 +/-
		. . TGGGACA AGCTGATTGGAAGGA ACACGCC.....	22 P 10-2 +/-
		. . TGGGACA AGCTGATTGGAAGGA ACACGCCGCC.....	14 P 10-2 +/-
		. . . GGCA AGCTGATTGGAAGGA ACACGCCGCC.....	5 P 10-2 +/-
		..... TGGGATTG TGGTGGCATTTCTC GGA.....	24 P 10-2 +/-
		.....	65 P 10-2 +/-
		. . TGGGACA AGCTGATTGGAAGGA ACACGCC.....	8 P 14-1 +/-
		..... TGGGATTG TGGTGGCATTTCTC GGA.....	8 P 14-1 +/-
		.....	16 P 14-1 +/-
high confidence	101	CTTTTCTG GCTCATGGGGAACAG TAGCTTCCGATGAC TGGCTCCAGGGTGA GGCCTAGGACCTTA CCCTGGAGGGACTG CTGCAGGGACTGG GACCTCCCAGAAA G	5 P 7-1 +/-
		(((((((((((((.((((.(((.(((((((((.....((((((((((((((((.(.((((((((((((.((((((((.(.((((.... .((.((.(((((((((	5 P 7-1 +/-
		********** ********** ********** ********** **********TA CCCTGGAGGGACTG CTGCAGGGACT**********	
		..... . TA CCCTGGAGGGACTG CTGCAGGGACT.....	
		.....	
		.....	
potential	102	GCCGAGCT GAACTGGAAAGTGGC AAGTGGTTGAGAACC AAAGTTTGGCCAAG TGTGATGGCTCACA CCTGTGACTTTGGT ACTTGAGAAGCTGG GACAGAAGGATGGC	28 P 7-1 +/-
		((((.(.((.((((((((((.((.((.((((((((((((((.....((((((.((((((((.(.((.(.((.((((.... .((((.((.((((((.((.((.((.(((((((	8 P 7-1 +/-
		********** ********** ********** ********** **********TGTGACTTTGGT ACTTGAGAAGCTGG**********	6 P 7-1 +/-
		..... . TGTGACTTTGGT ACTTGAGAAGCTGG.....	5 P 7-1 +/-
		..... . TGACTTTGGT ACTTGAGAAGCTGG GA.....	47 P 7-1 +/-
		..... . TGTGACTTTGGT ACTTGAGAAGCTG.....	
		..... . TGTGACTTTGGT ACTTGAGAAGCTGG A.....	
		.....	
		..... . TGTGACTTTGGT ACTTGAGAAGCTGG.....	6 P 7-2 +/-
		.....	6 P 7-2 +/-
		..... . TGTGACTTTGGT ACTTGAGAAGCTGG.....	31 P 10-1 +/-
		..... . TGTGACTTTGGT ACTTGAGAAGCTG.....	13 P 10-1 +/-
		..... . TGACTTTGGT ACTTGAGAAGCTGG GAC.....	11 P 10-1 +/-
		..... . TGACTTTGGT ACTTGAGAAGCTGG GA.....	5 P 10-1 +/-
		.....	60 P 10-1 +/-
		..... . TGTGACTTTGGT ACTTGAGAAGCTGG.....	39 P 10-2 +/-
		..... . TGACTTTGGT ACTTGAGAAGCTGG GA.....	5 P 10-2 +/-
		..... . TGACTTTGGT ACTTGAGAAGCTGG GAC.....	5 P 10-2 +/-
		..... . TGTGACTTTGGT ACTTGAGAAGCTG.....	5 P 10-2 +/-
		.....	54 P 10-2 +/-
		..... . TGTGACTTTGGT ACTTGAGAAGCTGG.....	15 P 14-1 +/-
		.....	15 P 14-1 +/-
potential	103	GAAGCCCA GTTCACTTGCAGGGG TCTCTCAAACACTCT TGTGACCTGCATTT GTCTGGTGATGGGC TGTCATATCGGTGT GATCTTCAGGATGA TCTGGGCACTGCCTC	8 P 7-1 +/-
		(((((((((.((((((..(((((((.....(((((.(.((.(..((.....(((.((((((.((((((((((.(((.((.((((.(((((((((	8 P 7-1 +/-
		********** ********** ********** ********** **********TGGGC TGTCATATCGGTGT GATCTTC**********	
		..... . TGGGC TGTCATATCGGTGT GATCTTC.....	
		.....	
		..... . TGGGC TGTCATATCGGTGT GATCTTC.....	10 P 10-1 +/-
		.....	10 P 10-1 +/-
		..... . TGGGC TGTCATATCGGTGT GATCTTC.....	9 P 10-2 +/-
		.....	9 P 10-2 +/-
		..... . TGGGC TGTCATATCGGTGT GATCTTC.....	5 P 14-1 +/-
		.....	5 P 14-1 +/-
high confidence	104	TGATATAG TGAGAATGCTTACT GCTCTGTTGTGATG GAGTGCTTTTTCGA ATGGACAATGTACT CCTTAACCTTGCAG ATTAGAAGACATT CCTCAATGGATCA	5 P 7-1 +/-
		((((.(((((((((((((((((.((((.((((.

non-candidate	108	GATCTGTC CCGAGTAAGCTCAC CTGCCTGGGTTCTC TGCCTCCTCTGACC TGCTTGATTGAGTC CTAGAACGCAGGCC TGGTTGCCCCTATG GGGACTCGGCT !!!!.!!!!.....!!.!!!!!!!!!!! .!!!!!!!!!!!!!! .!!!!!!!!!!!!.! ..!!!!!.!!!!!!. .!!!!.!!.....!! !!!!!!.!!!! ********** **********TTGGTTGAGTC CTAGAACGCAGGCC ********** .....TTGGTTGAGTC CTAGAACGCAGGCC ..... ---------- ---------- ---------- ---------- ---------- ---------- ----------
potential	109	GCTGACCT TGGGACCCTGGTGA AAGTGAAAGACTGA AAGCCCTGCCGCTCC ATTTGGAAGGAGCA ATGGGCTCTCCTTG ACTGAAAGGTCCCT TTAGTGTTTGGC !!.!!!!.!!!!!!!!!!!.!!!!.....!!!!.!!!!!!.....!!!!!!.!!.!!!!!!!!!!!.!!!!!.!!!!!!.!!.!!!!.!!!!!!.!!.!!.!!.!! ********* TGGGACCCTGGTGA AAGTGAAAGGAGCA ********** .... TGGGACCCTGGTGA AAGTGAAAGGAGCT ..... ---------- ---------- ---------- ---------- ---------- ---------- ----------
potential	110	TGTCCACC ATTTCTGAGTGGACT GGCTCCTGAGTGGTT TGTGCTGTGCACCC CTGCCCACCATGAT GCGAGTCTCTCTGC TTGTCTGCCTTGGG GACAGTTGATA !!!!!!!!.!!.!!!!!!!!!!.!!!!.....!!!!.!!!!!!!!.!!.!!!!.....!!!!.!!!!!!!!.!!.!!!!.....!!!!.!!!!!!!!.!!.!!.!!!!!!!! ******** *****TGAGTGGACT GGCTCCTGAGTGGTT TGT********** .....TGAGTGGACT GGCTCCTGAGTGGTT TGT..... .....TTCTGAGTGGACT GGCTCCTGAGTGGTT ....TGAGTGGACT GGCTCCTGAGTGGTT TG..... ---------- ---------- ---------- ---------- ---------- ---------- ----------
		.....TGAGTGGACT GGCTCCTGAGTGGTT TGT.....	5 P 7-2 +/-
			5 P 7-2 +/-
		.....TGAGTGGACT GGCTCCTGAGTGGTT TGT.....	17 P 10-1 +/-
		.....TGAGTGGACT GGCTCCTGAGTGGTT TG.....	13 P 10-1 +/-
		.....TTCTGAGTGGACT GGCTCCTGAGTGGTT	13 P 10-1 +/-
			43 P 10-1 +/-
		.....TGAGTGGACT GGCTCCTGAGTGGTT TGT.....	30 P 10-2 +/-
		.....TGAGTGGACT GGCTCCTGAGTGGTT TG.....	14 P 10-2 +/-
		.....TTCTGAGTGGACT GGCTCCTGAGTGGTT	10 P 10-2 +/-
		.....TTTCTGAGTGGACT GGCTCCTGAGTGGTT	5 P 10-2 +/-
			59 P 10-2 +/-
		.....TGAGTGGACT GGCTCCTGAGTGGTT TGT.....	63 P 14-2 +/-
		.....TGAGTGGACT GGCTCCTGAGTGGTT TG.....	8 P 14-2 +/-
			71 P 14-2 +/-
		.....TGAGTGGACT GGCTCCTGAGTGGTT TGT.....	168 P 14-1 +/-
		.....TGAGTGGACT GGCTCCTGAGTGGTT TG.....	23 P 14-1 +/-
		.....TTCTGAGTGGACT GGCTCCTGAGTGGTT	11 P 14-1 +/-
		.....TTTCTGAGTGGACT GGCTCCTGAGTGGTT	7 P 14-1 +/-
		.....TGAGTGGACT GGCTCCTGAGTGGTT TGTG.....	5 P 14-1 +/-
		.....TGAGTGGACT GGCTCCTGAGTGGTT TGTGCT.....	5 P 14-1 +/-
		.....TTCTGAGTGGACT GGCTCCTGAGTGGT.	5 P 14-1 +/-
		.....TTCTGAGTGGACT GGCTCCTGAGTGGTT T.....	5 P 14-1 +/-
		.....TTCTGAGTGGACT GGCTCCTGAGTGGTT TGT.....	5 P 14-1 +/-
			234 P 14-1 +/-
high confidence	111	CCAGCTCCG AGGACCTGATGGGTG TCTTACCTGGGGATT TGTTTACGATCTGA CACCCCTGTCCAG GAATTCGAAGGTAA GGGACACACGGTAG GGAAGGGCTGG !!!!!!!. ....!!!!!.!!!!!!!!!!!!!

high confidence	117	GGATTCCC ACACTTCTCTGAA ATCGAGTAGAGACA ATTTAATTGTATTC TGCATACTCTCTCC TTTGCCCGTCCTCG GGAACCTGCCTGTC TGGGACCT .(.(((((((((.(...(((.(((((((((.((.((.((((.(.....((((.((.((.((((((((.((.....((((.((.((.((((((((. ********* *******TCTGAA ATCGAGTAGAGACA ATTTA********** ********** ********** ********** ********** ********** .....TCTGAA ATCGAGTAGAGACA ATTTA..... ....

potential 1.27 CCATAGTC CCCTTGGACCTAGT TGACCTTGCAGGGC CGAGGCCAAAATAC TGTCCCTCTTCTCC TTGCCCACCTTAAT GTAGCCTCCAGTTA TGG

non-candidate 1.28 GGTCTCAG GGCTCAGTCGATT TGTCTCTGGAGAGA GGGCAGTGTGGGTT TTGGCCTCTCTGTGGG CTCTAAAGGAAAGG TGACTGGGGTCCTGG GCC

high confidence 1.29 GGGTGAGA GTAGGGGATGATGA GGACTGTTTTTTTT TCTTTTAAATTTTG CTTTGAGAGGCAGG CTTCGAGATCTTTTG GTTCTCTCTCTCTAA CCC

high confidence 1.30 GGCACTGT GAGATTTGTTCATG ATCTTCTGACTTAC CCGTTGCAAGAGGA GCCGATGTCCTTAT CAGGAAGATCGAG GCAGTCTCCGCGAT GCT

high confidence plus star 1.31 ACTCTACA TAAGGAACTTGAAG ACAGCCTAAGCTAC ATTGTGGAGACCTG TCTCAACAACAAG ATAATAAACTGTTTT GTGCTCTCCTTAAG ACT

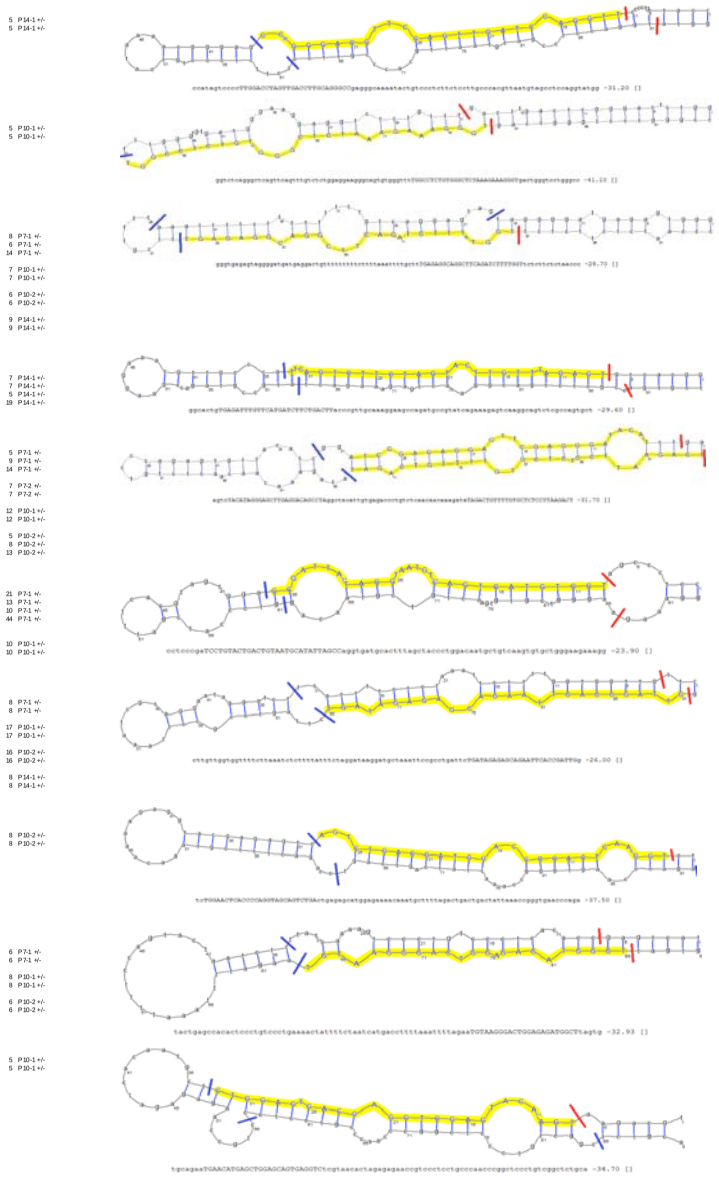
potential 1.32 CCTCCCCGA TCCTGTACTGACTG TAATGCGTATTAAC CAGGTGATGCACTT TAACTACCCTGAAC AATGCTGTCAAGTG TGCTGGGAAGAAAG G

high confidence 1.33 CTTGGTGG TGGTTTTCTTAAAT CTCTTTTAGTTCTA GGATGAGGATGCTA AATTCCGCCTAGTT CTGATAGAGAGCAG AATTCACCGATTGG

potential 1.34 TCTGGAAC TCACCCCAGGTAGC ACTCTGACTGAGAG CATGGAGAAAACGA ATGCTTTTAGACTG ACTGACTATTAAAC CGGGTGAGCCCGGA

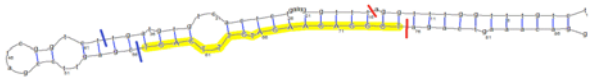
high confidence 1.35 TACTGAAC CACACTCCCTGTCC CTGAAAACTATTTT CTAATCATGACCTT TTAAATTTTGAGAT GTAAGGGACTGGAG AGATGGCTTAGTG

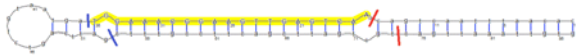
potential 1.36 TGCGAAAT GAACATGAACTGGA GCAGTGAGGTCTCG TAACACTAGAGAGA ACCGTCCCTGCTGC CCAACCCGGCTCCC TGTCGGACTCTGCA

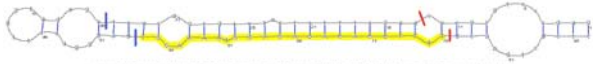


high confidence	137	GGGAATTA GATGTTACCACCAC TGTTTTCGATGCGT CCCAAATATACAC CATAATCTCGAAAT GGGGAAAGGAGTA GCGTTAAGTCTCC (((.((.(.(((((.(((.(.(.((((.(.((.(.(((.((((((.((.(((.(.((.((.(.((.(.(.(

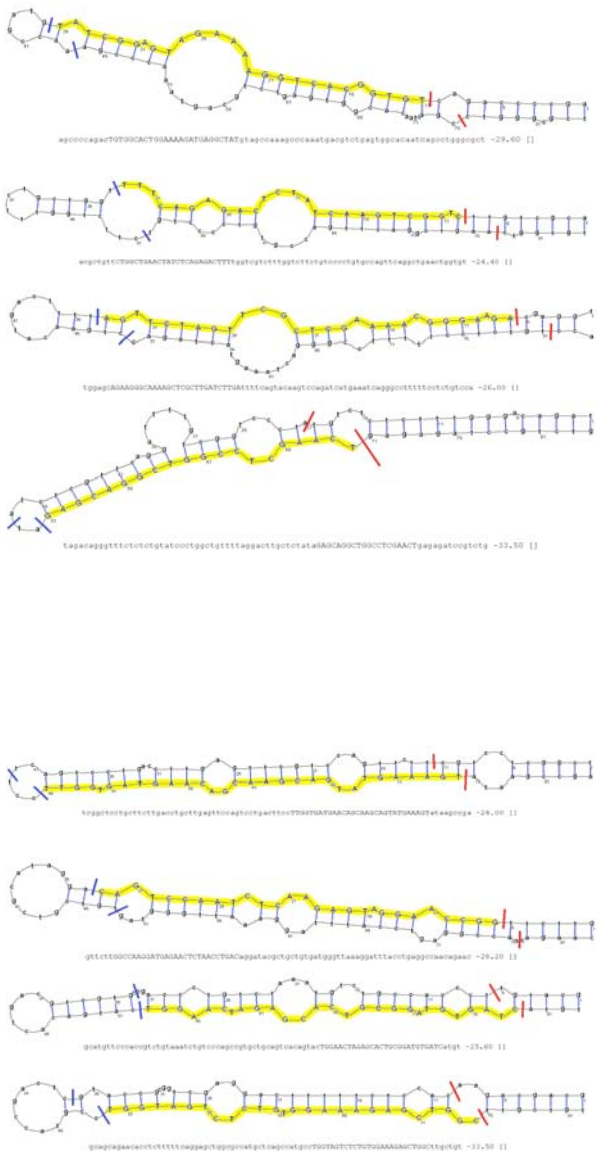
high confidence	146	TCTGTTTTG GTTTGGATTTGTGA AAGTCTCACTGTGT ATTTCTGACTAGCC TTGAGCTCACTTG TAGAACAGGCTAGA CTGAAACAGG	25 P10-1 +/- 15 P10-1 +/- 10 P10-1 +/- 7 P10-1 +/- 6 P10-1 +/- 5 P10-1 +/- 68 P10-1 +/-
		TGACTTTG TAGAACAGGCT TGACTTTG TAGAACAGGC TGACTTTG TAGAACAGGCT TGACTTTG TAGAACAGGCTAGA TGACTTTG TAGAACAGGCTAGA C CTGACTTTG TAGAACAGGCT TGACTTTG TAGAACAGGCTAG	71 P10-2 +/- 38 P10-2 +/- 20 P10-2 +/- 14 P10-2 +/- 10 P10-2 +/- 10 P10-2 +/- 5 P10-2 +/- 168 P10-2 +/-
		TGACTTTG TAGAACAGGCT TGACTTTG TAGAACAGGC TGACTTTG TAGAACAGGCTAG TGACTTTG TAGAACAGGCTA TGACTTTG TAGAACAGGCTAGA TGACTTTG TAGAACAGGCTAGA C CTGACTTTG TAGAACAGGCT	34 P14-1 +/- 20 P14-1 +/- 9 P14-1 +/- 6 P14-1 +/- 5 P14-1 +/- 74 P14-1 +/-
non-candidate	147	CTGCCCATC CTATCACTTTGGATTG TAGGCCCATTGGAA GGGTTAGCCTCTTG ACCCCAATGGACCT ACGATTCTAGTGTG GGATGGCGG	7 P7-3 -/- 7 P7-3 -/-
high confidence	148	CACGATTT AACTGACGACTGAG TTGGAGGCAAAGT ATTAATGTCTACT TAGCTTTGCTTCA GCTTGATCGTCGAT TAAATTGTG	6 P7-1 +/- 6 P7-1 +/- 5 P7-4 -/- 5 P7-4 -/-
high confidence	149	GAGCCCTG TGCACAAACTTTCT CATCTGTGACACTC GAGATGGTTTCAGG GAGTGGACACTGGA GAGGAGCTTTTGC AAGTCGCTC	54 P7-1 +/- 38 P7-1 +/- 8 P7-1 +/- 90 P7-1 +/- 31 P7-2 +/- 16 P7-2 +/- 47 P7-2 +/- 81 P7-3 -/- 49 P7-3 -/- 14 P7-3 -/- 144 P7-3 -/- 102 P7-4 -/- 76 P7-4 -/- 11 P7-4 -/- 189 P7-4 -/-
		TGACACTGGA GAGGAGCTTTT TGACACTGGA GAGGAGCTTT TGACACTGGA GAGGAGCTT	20 P10-1 +/- 19 P10-1 +/- 39 P10-1 +/-
		TGACACTGGA GAGGAGCTTTTT TGACACTGGA GAGGAGCTTT	17 P10-2 +/- 8 P10-2 +/- 25 P10-2 +/-
		TGACACTGGA GAGGAGCTTTT TGACACTGGA GAGGAGCTTT TGACACTGGA GAGGAGCTT	59 P10-3 -/- 45 P10-3 -/- 11 P10-3 -/- 115 P10-3 -/-
		TGACACTGGA GAGGAGCTTTT TGACACTGGA GAGGAGCTTT TGACACTGGA GAGGAGCTT	52 P10-4 -/- 41 P10-4 -/- 6 P10-4 -/- 99 P10-4 -/-
		TGACACTGGA GAGGAGCTTTT TGACACTGGA GAGGAGCTTT	14 P14-1 +/- 8 P14-1 +/- 22 P14-1 +/-
		TGACACTGGA GAGGAGCTTTT TGACACTGGA GAGGAGCTTT	22 P14-3 -/- 14 P14-3 -/- 36 P14-3 -/-
		TGACACTGGA GAGGAGCTTTT TGACACTGGA GAGGAGCTTT TGACACTGGA GAGGAGCTT	29 P14-4 -/- 20 P14-4 -/- 6 P14-4 -/- 55 P14-4 -/-
non-candidate	150	TGGCTGGC TGCTAGATTTGTAAG CTGATGAGGGCAGA AACCTCATTCCTTT CTGTATTCTCATTG CTGAACACATAGCT GCTGCTCA	6 P10-1 +/- 6 P10-1 +/-
high confidence	151	GGGCCCAGC CTATCTGGGTTCAT GCAGTGTGATCTCT TTCCTTCATTGGGC TCAGGGAACCTTTT GACTGTGTGCAAGG GCTGGGCT	13 P14-1 +/- 6 P14-1 +/- 19 P14-1 +/-
		TCTGGGTTCAT GCAGTGTGATCTCT TT TTT GACTGTGTGCAAGG GCTGG	
high confidence	152	TTGCCCATC TAAATGTGCGACTC TTGGGGAGAGCTTCC AGGGCAGATGCCTG GGCTCTGTGAGGG TGGGGCTCCAGGG TTGGGTGA	9 P14-1 +/- 6 P14-1 +/- 15 P14-1 +/-
		TC TAAATGTGCGACTC TTGGGGAGAGCTTT TC TAAATGTGCGACTC TTGGGGAGAGCTT TAAATGTGCGACTC TTGGGGAGAGCTTC	



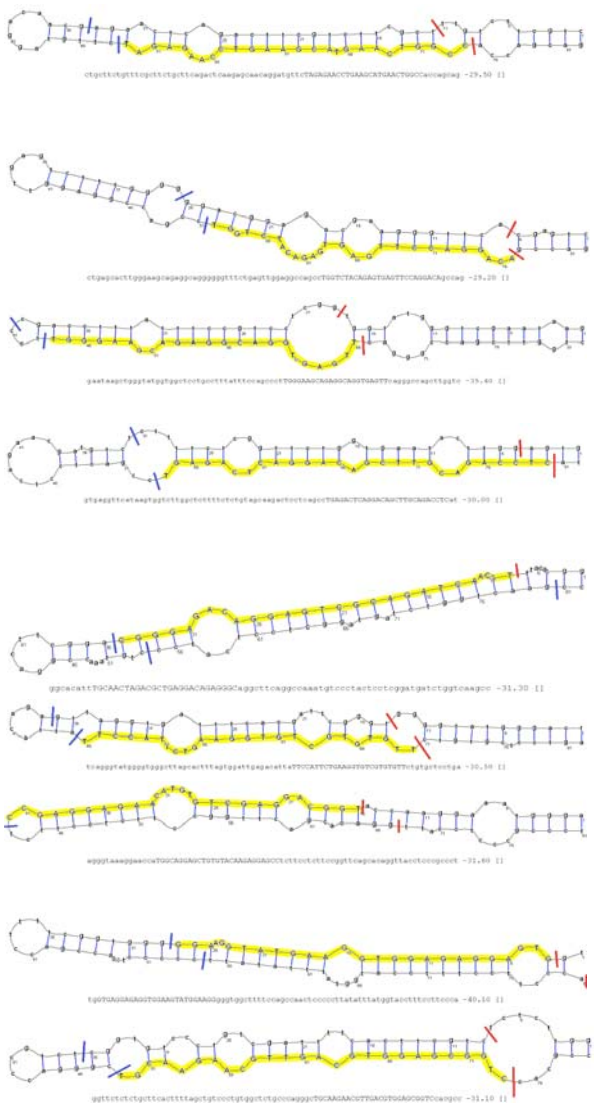




potential	153	ACCCCCAG ACTGTGCGCACTGGA AAAGATGAGCTAT GTAGCCAAAGCCCA AATGACGTCTGAGT GGCACAATCAACCT GGGCGCT	6 P 10-2 +/- 6 P 10-2 +/-
potential	154	ACGCTGTT CTGGCTGAACTATC TCAGAGACTTTTGG TCGTCTTTTGGTCTT CTGTCCCCTGTGCC AGTTCAAGCTGAAC TGGTGT	5 P 14-1 +/- 5 P 14-1 +/-
high confidence	155	TGGAGCAG AAGGGCAAAAGCTC GCTTGATCTTGATT TTCGATACGAGTCC AGATCATGGAATCA GGGCCTTTTTCCTC TGTCCA	5 P 7-2 +/- 5 P 7-2 +/-
potential	156	TAGACAGG GTTTCTCTCTGTAT CCCTGGCTGTTTTA GGACTTGGTCTCTATA GAGCAGGCTGGCCT CGAACTGAGAGATC CGTCTG	861 P 14-1 +/- 258 P 14-1 +/- 225 P 14-1 +/- 211 P 14-1 +/- 210 P 14-1 +/- 125 P 14-1 +/- 68 P 14-1 +/- 51 P 14-1 +/- 39 P 14-1 +/- 18 P 14-1 +/- 15 P 14-1 +/- 15 P 14-1 +/- 9 P 14-1 +/- 7 P 14-1 +/- 5 P 14-1 +/- 5 P 14-1 +/- 2122 P 14-1 +/-
			1211 P 14-3 -/- 309 P 14-3 -/- 298 P 14-3 -/- 276 P 14-3 -/- 190 P 14-3 -/- 100 P 14-3 -/- 57 P 14-3 -/- 46 P 14-3 -/- 37 P 14-3 -/- 29 P 14-3 -/- 19 P 14-3 -/- 15 P 14-3 -/- 11 P 14-3 -/- 8 P 14-3 -/- 7 P 14-3 -/- 7 P 14-3 -/- 6 P 14-3 -/- 5 P 14-3 -/- 5 P 14-3 -/- 2636 P 14-3 -/-
potential	157	TCGGCTCC TGCTTCTTGAGCTG CTTGAGTTCCAATC CTGACTTCCTTGGT GATGAACAGCAAGC AGTATGAAAGTATA AGCCGA	15 P 7-1 +/- 6 P 7-1 +/- 21 P 7-1 +/- 7 P 10-1 +/- 7 P 10-1 +/- 14 P 10-1 +/-
high confidence	158	GTTCCTGG CCAAGGATGGAGAC TCTAACCTGACAGG ATACGCTGCTGTGA TGGGTTAAAGGATT TACCTGAGCCGAC AGAAC	5 P 7-1 +/- 5 P 7-1 +/- 5 P 10-4 -/- 5 P 10-4 -/-
high confidence	159	GCATGTTC CCACCGTCTGTAAA TCTGTCCCAGCCGT GCTGCAATCACAGT ACTGGAACTAGAAC ACTGCGGATGTGAT CATGT	7 P 7-1 +/- 7 P 7-1 +/-
high confidence	160	GCAACAGA ACACTCCTTTTTCA GGAACTGAGCCCAT GCTCGAGCCATGCCT GGTAGTCTCTGTGG AAAGAACTGGCTTG CTGT	7 P 7-1 +/- 7 P 7-1 +/- 11 P 10-1 +/- 11 P 10-1 +/-



high confidence	161	CTGCTCT GTTTCGCTCTCTCT TCGACTCGAGAGC AACAGAATTTTCTA GAGAACTTGAAGCA TGAACTGGCCACCA GCAG	22 P 7-1 +/- 11 P 7-1 +/- 10 P 7-1 +/- 43 P 7-1 +/-
		TA GAGAACTTGAAGCA TGAACTGGCC TA GAGAACTTGAAGCA TGAACTGGCC TA GAGAACTTGAAGCA TGAACTGGCCA TA GAGAACTTGAAGCA TGAACTGGCCAC	
		TA GAGAACTTGAAGCA TGAACTGGCC TA GAGAACTTGAAGCA TGAACTGGCCA	37 P 10-1 +/- 7 P 10-1 +/- 44 P 10-1 +/-
		TA GAGAACTTGAAGCA TGAACTGGCC TA GAGAACTTGAAGCA TGAACTGGCCA	33 P 10-2 +/- 6 P 10-2 +/- 39 P 10-2 +/-
		TA GAGAACTTGAAGCA TGAACTGGCC	15 P 14-1 +/- 15 P 14-1 +/-
non-candidate	162	CTGAGCAC TTGGGAAACGAAG CAGGGGGTTTCTG ACTTGGAAGCCAAC CTGGTCTACAGAGT GAGTTCCGGAGCAG CCAG	6 P 10-1 +/- 26 P 10-1 +/- 5 P 10-1 +/- 37 P 10-1 +/-
		TGGGAAACGAAG CAGGGGGTTTCT TGGTCTACAGAGT GAGTTCCGGAGCA TGGTCTACAGAGT GAGTTCCGGAGCAG	
potential	163	GAATAAGC TGGGTATGGTGGCT CCTGCCCTTTGATTTC CAGCCCTTGGGAAG CAGAGGGAGGTGAG TTCAGGGCCAGCTT GGTC	8 P 10-2 +/- 8 P 10-2 +/-
		TGGGAAG CAGAGGGAGGTGAG TT TGGGAAG CAGAGGGAGGTGAG TT	
potential	164	GTGAGGTT CATGAGTGGGTCTTG GCTCTTTTCTCTGT ACCAGAGACTCCTCA GCCTGAGACTCAGG ACAGCTTGCAGACC TCAT	6 P 10-1 +/- 6 P 10-1 +/- 8 P 10-2 +/- 8 P 10-2 +/-
		TGAGACTCAGG ACAGCTTGCAGACC TC TGAGACTCAGG ACAGCTTGCAGACC TC	
		TGAGACTCAGG ACAGCTTGCAGACC TC TGAGACTCAGG ACAGCTTGCAGACC TC	
high confidence	165	GGCGCATT TGCAACTGAGCGCT GAGGGCAGGGGCA GGCTTCAGGCCAAA TGTCCCTACTCCTC GGATGAACTGATCA ACCC	5 P 10-1 +/- 5 P 10-1 +/-
		TGCAACTGAGCGCT GAGGGCAGGGGCC TGCAACTGAGCGCT GAGGGCAGGGGC	
high confidence	166	TCAGGGTA TGGGGTGGGCTTAG CACTTTAATGGATT GAGACATTATTCCA TTCTGAAAGTGTCG TGTGTTCTGTGCTC CTGA	5 P 7-1 +/- 5 P 7-1 +/- 6 P 10-2 +/- 5 P 10-2 +/- 11 P 10-2 +/-
		TTCCA TTCTGAAAGTGTCG TGTGTT TTCCA TTCTGAAAGTGTCG TGTGTTC	
		TTCCA TTCTGAAAGTGTCG TGTGTT TTCCA TTCTGAAAGTGTCG TGTGTTC	
non-candidate	167	AGGGTAAA GGAACCATGGCAGG AGCTGTGTACAAGA GGAGCCTCTTCCTC TTCCGGTTCAGCAC AAGTTACCTCCCGC CCT	6 P 10-1 +/- 6 P 10-1 +/-
		TGGCAGG AGCTGTGTACAAGA GGAGCC TGGCAGG AGCTGTGTACAAGA GGAGCC	
high confidence	168	TGGTGAGG AGAGGTGGAGTAT GGAAGGGGGTGGCT TTTCCAGCCAACTC CCCCTTGATTTAT GGTGACTTTCCTTC CCA	6 P 7-1 +/- 6 P 7-1 +/-
		TGGAGG AGAGGTGGAGTAT GGAAGG TGGAGG AGAGGTGGAGTAT GGAAGG	
potential	169	GGTTCTCT CTGCTTCACTTTTA GCTGTCCCCTGTGAC TCTGCCCCAGGGCTG CAGGAACGTTGACG TGGAGCGGTCCACG CC	5 P 7-1 +/- 5 P 7-1 +/-
		TG CAGGAACGTTGACG TGGAGCGGTC TG CAGGAACGTTGACG TGGAGCGGTC	



non-candidate

```
170 TGTGCCTA TGTGCTGTGATACT GGGAGGCAAAGGAA AGGGCCATGGCGTC CCTTTCTGTTACCA GGACCATCTAAGCA GG
    ..(((((( ((((((((((((((. ((((.((.(((.... ...(.((((.((. ...((((.(((((((. ...(((((.(((((((..
    ******* TGTGCTGTGATACT GGGAGGCAAAGGA* ********************************** ******************
    ....... TGTGCTGTGATACT GGGAGGCAAAGGA. ......................................................
    ......................................................................................
```

potential

```
171 TCAGCTCC TGCTTTTCTGGACTG CTTGAGTTCCCATTC CTGACTTCCTTGGT GATGAACAACCATA TGGAAAGGTAAGCT GA
    ((((((( ((((((((.((((((. ((((.((((.(.... .(.(.( ((((((((((((((. ((((((((.((((((((
    ******** ********************** ********************** *********TTGGT GATGAACAACCATA TGGAAAGGTA*****
    ........................................................TTGGT GATGAACAACCATA TGGAAAGGTA......
    ......................................................................................
```

high confidence

```
172 AGTCCTGG AACTCGCTCTGTAG ACCAGGCTATCCCC AAACTCAGAGATTC GCCTGCCTCTGCCT TCTGAGTGCTGGGA CT
    ((((((. ((((((.... (((((.(((((. (((.... ...((((.((((. ((((((.((((((. ((((((.((((((.(((((
    ******** ***TCGCTCTGTAG ACCAGGCTATC*** ********************************** ******************
    ......... .TCGCTCTGTAG ACCAGGCTATC.... ......................................................
    ......... .TCGCTCTGTAG ACCAGGCTA..... ......................................................
    ......... .CGCTCTGTAG ACCAGGCTATC.... ......................................................
    ......................................................................................
    ......... .TCGCTCTGTAG ACCAGGCTATC.... ......................................................
    ......................................................................................
    ......... .TCGCTCTGTAG ACCAGGCTATC.... ......................................................
    ......... .. TCGCTCTGTAG ACCAGGCTAT... ......................................................
    ......................................................................................
```

high confidence

```
173 AGGGCCTC CTCCTTCACGCGCC TGGGGAGGTATTCA GAGTCCCAGGCCTT TAGGCCTTCTGAG CGTGGGGAAGGTTC T
    ((((((( (((((((((((((. ((((((.((.(.... ...((((.((((((. ((((((.((((((. ((((.(.(((((((((
    ******** ********************** ********************** TAGGCCTTCTGAG CGTGGGGAAGGTT* **
    ......... ......................................... TAGGCCTTCTGAG CGTGGGGAAGGTT. . .
    ......................................................................................
    ..................................................... TAGGCCTTCTGAG CGTGGGGAAGGTT. . .
    ......................................................................................
```

high confidence

```
174 GCTGCATT CCTGGGACATGTGA CAGCAGCCTCCCCT TTCTCTGGGAGGGA GGCTTCTGTCTTGT CTTGGGTGTGATAG C
    ((((((( ((.((((((.... .((((((.((((((((((. ....((((.((((((.((((((.((((.((.((((((((((((
    **TGCATT CCTGGGACATGTGA CAGCAGC********** ********************** ********************** **
    .. TGCATT CCTGGGACATGTGA CAGCAGC..... ......................................................
    ......................................................................................
```

high confidence

```
175 TGTGGCTC AGTGCTTCGAGTCA GCGTTGTGATCTCA GTTCCTCTGTGAAC TACGATGCTGAATG AGTCATTCCAGCCTC A
    .(.((((( ((((.((((.((((((((((((.((.(.... ...((((.((.((((((((((((.((((.((((.((((((((.(
    ******** ********************** ********** ***TGTGAAC TACGATGCTGAATG AGTCA********* **
    ......... ......................................... .TGTGAAC TACGATGCTGAATG AGTCA.........
    ......... ......................................... .TGTGAAC TACGATGCTGAATG AGTCAT........
    ......................................................................................
```

high confidence

```
176 CTGGATCT CAGTGGTCGAGACA CTCTCTCCAGGCCA GCTCCTCCTTTCA GGGAAGGTGCACAG AAGTCTGCACCTCA G
    ((((((( ((((.((((.((.((((((((((((((.... ...((((((((((. ((((.(.((.(.((((.((((((((((((
    ******** ********************** ********TTTCA GGGAAGGTGCACAG AAGTCTGC********* **
    ......... ......................................... TTTCA GGGAAGGTGCACAG AAGTCTGC........
    ......... ......................................... TTTCA GGGAAGGTGCACAG AAGTCTG.........
    ......... ......................................... TTTCA GGGAAGGTGCACAG AAGTCTGC.......
    ......................................................................................
    ......... ......................................... TTTCA GGGAAGGTGCACAG AAGTCTGC.......
    ......... ......................................... TTTCA GGGAAGGTGCACAG AAGTCTG.........
    ......... ......................................... TTTCA GGGAAGGTGCACAG AAGTCTGC.......
    ......................................................................................
    ......... ......................................... TTTCA GGGAAGGTGCACAG AAGTCTGC.......
    ......... ......................................... TTTCA GGGAAGGTGCACAG AAGTCTG.........
    ......... ......................................... TTTCA GGGAAGGTGCACAG AAGTCTGC.......
    ......................................................................................
    ......... ......................................... TTTCA GGGAAGGTGCACAG AAGTCTGC.......
    ......................................................................................
```

high confidence

```
177 GCTGATTT TCCTGACTTGTAGG GAACGCAGAGATAC ACAAGTAATCTTAA ATGCTCTCCTACCA GAAGGAATCTTTAG T
    ((((((. ((((.((.((((((((((((((((((((.... ...((((((.((.((((((((((.((.((((((.((((((((((
    ******** TCCTGACTTGTAGG GAACGCAGAGA*** ********************** ********************** **
    ......... .TCCTGACTTGTAGG GAACGCAGAGA.... ....................................................
    ......... . TGACTTGTAGG GAACGCAGAGATAC A ....................................................
    ......... TCCTGACTTGTAGG GAACGCAGAGAT... ....................................................
    ......... . TGACTTGTAGG GAACGCAGAGATAC AC....................................................
    ......... TCCTGACTTGTAGG GAACGCAGAGATA... ....................................................
    ......................................................................................
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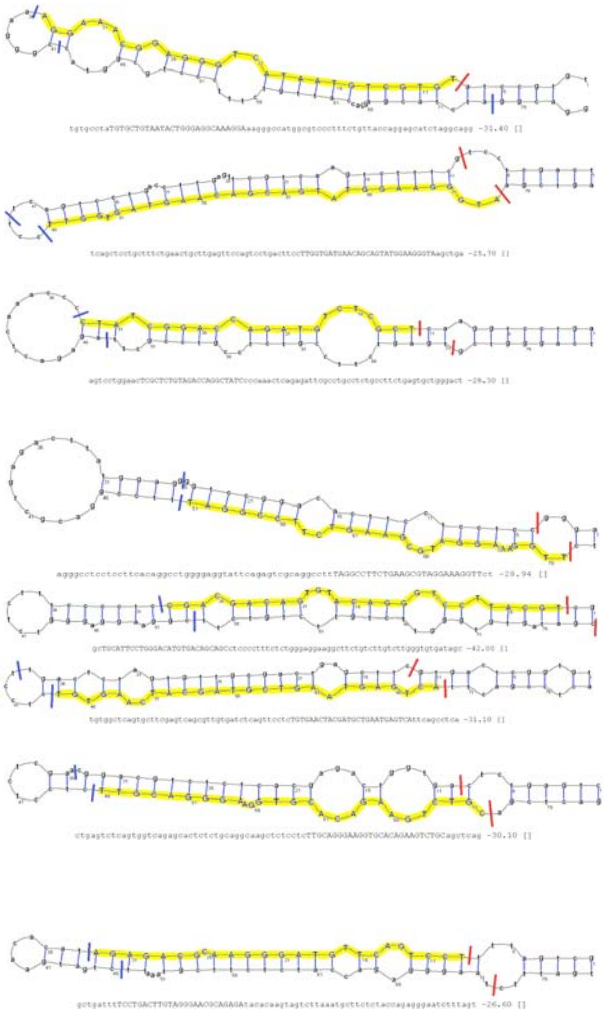


potential

178 TCCTGGAA TTCACTTTTGTAGAG CAGGCTGGTCTTGA ACTCCACAGAAATTT GCCTGCCTCTGTCT CCCGGGTGCTAGGA

21 P 7-1 +/-
5 P 7-1 +/-
26 P 7-1 +/-

47 P 7-3 -/-
12 P 7-3 -/-
11 P 7-3 -/-
10 P 7-3 -/-
6 P 7-3 -/-
86 P 7-3 -/-

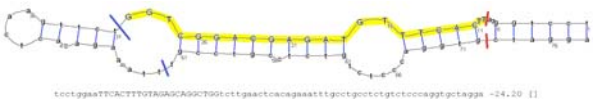
12 P 7-4 -/-
5 P 7-4 -/-
17 P 7-4 -/-

24 P 10-3 -/-
13 P 10-3 -/-
12 P 10-3 -/-
40 P 10-3 -/-

33 P 10-4 -/-
16 P 10-4 -/-
6 P 10-4 -/-
55 P 10-4 -/-

18 P 14-1 +/-
5 P 14-1 +/-
23 P 14-1 +/-

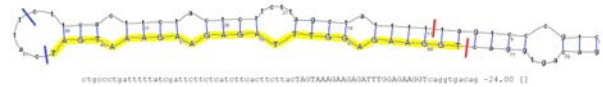
31 P 14-4 -/-
8 P 14-4 -/-
8 P 14-4 -/-
5 P 14-4 -/-
52 P 14-4 -/-



potential

179 CTGCCCTG ATTTTTATCGATTC TTCTCATCTTCACT TCTTACTACTTAAAG AAGAGATTTGGAGA AGGTCAGGTGACAG

20 P 14-1 +/-
18 P 14-1 +/-
17 P 14-1 +/-
9 P 14-1 +/-
5 P 14-1 +/-
69 P 14-1 +/-

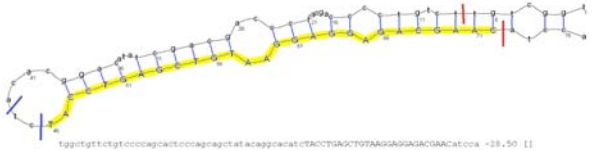


non-candidate

180 TGGCTGTT CTGTCCCCGACACT CCCGACGACTATAC AGGCACATCTACCT GGACTGTTAAGGAG AGACGAACATCCA

9 P 7-1 +/-
9 P 7-1 +/-

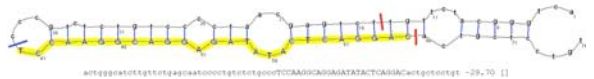
5 P 10-1 +/-
5 P 10-1 +/-



non-candidate

181 ACTGGGCA TCTTGTTCTGAGCA ATCCCCTGTCTCTG CCCTCCAAGGCAGG AGATATACTCAGGA CACTGCTCCTGT

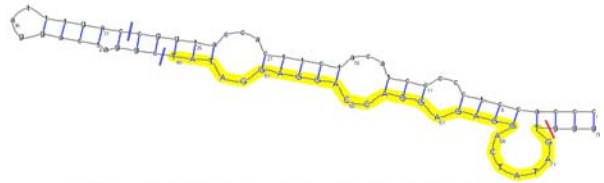
6 P 10-2 +/-
6 P 10-2 +/-



potential

182 CCCACCTC CCCCTACACTCTTCA CCATGGCCATTTTA GGACTAAGCTATAG GAGGACCAGGAGAG GACTATATGTGGG

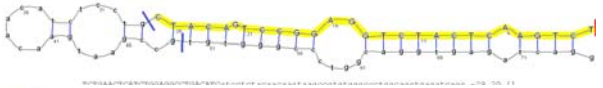
9 P 7-1 +/-
9 P 7-1 +/-



high confidence

183 TCTGAACT CATCTGGAAGCCTG ACATCCTCTCCTAC AACAATTAAGCCCCT CTCCCCCCTGGCAG GTGGATCCAGG

6 P 7-1 +/-
6 P 7-1 +/-

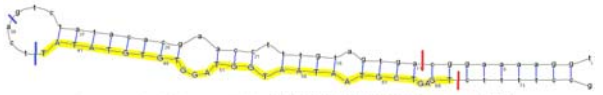


non-candidate

184 TGAGAAAAG GCAATTAAATTTTCC AAAGCACATATCTGA CTTATATGTTGGGA TGGTAATAATGCTG AATCTTTTCCG

5 P 7-1 +/-
5 P 7-1 +/-

7 P 7-4 -/-
7 P 7-4 -/-



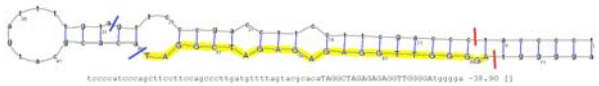
high confidence 185 TCCCCATC CCAACTTCCTTCCA GCCCTTNATNTTTT ACTACCACATAGG CTAGAAGAGAGTTG GGGATGGGGA

5 P 7-1 +/-
5 P 7-1 +/-

16 P 7-3 -/-
11 P 7-3 -/-
6 P 7-3 -/-
33 P 7-3 -/-

13 P 7-4 -/-
9 P 7-4 -/-
5 P 7-4 -/-
27 P 7-4 -/-

5 P 10-3 -/-
5 P 10-3 -/-



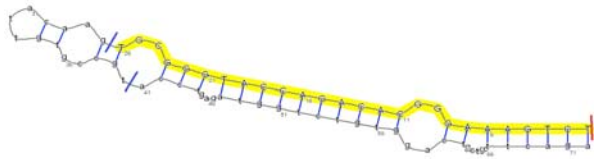
potential 186 AGAATTCA GTTAGAAATTACAT TGATTTAAGAAATG GTAATGGGCTTAGA TCGATGTGGTGCTC CTGAGTTCT

15 P 14-4 -/-
5 P 14-4 -/-
5 P 14-4 -/-
25 P 14-4 -/-

high confidence 187 TCTGAAAG GGCACAGACCATGG GCGTGAACATTGTG CCGTACCTGGAGTG GTCTGTGGACTGCT GCTTCAGA

8 P 10-1 +/-
8 P 10-1 +/-

5 P 10-2 +/-
5 P 10-2 +/-

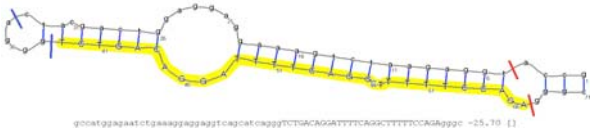


high confidence 188 CTCCATGG ACCAGCCGGCCCC ATGACTGATGAGAC CCATCCTCTGATGGA GACTGGCGCCTATT CTGTGGAG

5 P 10-1 +/-
5 P 10-1 +/-

high confidence 189 GCCATGGA GAATCTGAAAGGAG GAAGTCAGCATCAG GGTCTGACAGGATT TTCGGCTTTTTCC AGAGGC

5 P 7-1 +/-
5 P 7-1 +/-



high confidence 190 GTCTGGCG GCAATCAGGATACC TGTCTTTCCTGATA GGAATGAGTTACAG GTGTTTCCTCTGCC GTCACAC

7 P 7-1 +/-
7 P 7-1 +/-

5 P 7-2 +/-
5 P 7-2 +/-

18 P 7-3 -/-
18 P 7-3 -/-

15 P 7-4 -/-
15 P 7-4 -/-

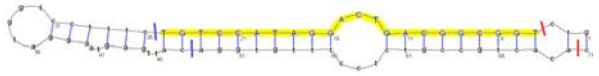
9 P 10-1 +/-
9 P 10-1 +/-

7 P 10-2 +/-
7 P 10-2 +/-

14 P 10-3 -/-
14 P 10-3 -/-

14 P 10-4 -/-
14 P 10-4 -/-

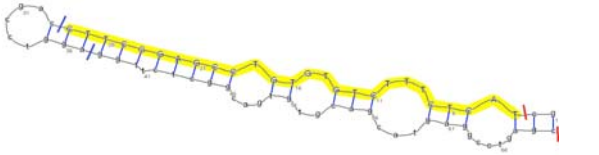
8 P 14-3 -/-
8 P 14-3 -/-



high confidence 191 GCTACTCT TTCTGTGTGTCCGA GGCTTCCAGCCTGG AGGTTCTCGGCAGT GTGCAGCATGAGGC CTGAGC

5 P 10-1 +/-
5 P 10-1 +/-

5 P 10-2 +/-
5 P 10-2 +/-



non-candidate

```
192 CCTTTGTT AATCCTCTCACTAG CATCATCTGCACTT AAGAAGTTGTTGCAGT GAAGAAGATGGCTG AAG
    ||||.||||.||||||||||.||.||.||.|.....|.||.||||||||||.||||||||||.||.|||
    ********************************TAAGAAGTTGTTGCAGT GAAGAAGATGG******
    ..............................TAAGAAGTTGTTGCAGT GAAGAAGATGG.......
    ..............................TAAGAAGTTGTTGCAGT GAAGAAGATGGC......
    ..............................................................
    ..............................TAAGAAGTTGTTGCAGT GAAGAAGATGG.......
    ..............................TAAGAAGTTGTTGCAGT GAAGAAGATGG.......
    ..............................TAAGAAGTTGTTGCAGT GAAGAAGATGG.......
    ..............................TAAGAAGTTGTTGCAGT GAAGAAGATGG.......
```

high confidence

```
193 AACTCTTC CCAAGTATGGAACC AGGGGCTTCTGGCA AGCCTGTCCTGGCA CTGTGGTGGGACTG GTT
    ||||..||||..||||||..||||||||||||.....||||||..||||||..||||||.||||..|||
    ********************************************TCCTGGCA CTGTGGTGGGACTG GTT*
    ..........................................TCCTGGCA CTGTGGTGGGACTG GTT.
    ..............................................................
```

high confidence

```
194 CCCGACTT GTACTTAGACCTGT CAATCAGTGCTCTC ACTGACATAGCTGA GCACTCAAAGATGG G
    ||||.||||||||||...||||||.||....||.||||||||...||||||||...||.||||.||||
    ********************************************TTGACATAGCTGA GCACTCAAAGATGG **
    ..........................................TTGACATAGCTGA GCACTCAAAGATGG ..
    ..............................................................
```

potential

```
195 GTGTCTGA GTGCTTGTCCTGCC CTAGCAGGGACTCTG ATGGGGAACAGGAG GACTCCCCGCCCAC
    |||.|||.|||.|||||||||||.|||.||||...|||.||||||.||||.||.||||||.|||
    ********************************************TG ATGGGGAACAGGAG GACTCCCCGC***
    ..............................................TG ATGGGGAACAGGAG GACTCCCCGC....
    ..............................................................
    ..............................................TG ATGGGGAACAGGAG GACTCCCCGC....
    ..............................................................
```

high confidence

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196 TGGGTTGAG GGGAGCTAAGTTAGA AAGCCAGAAGCATA TGTGGTTTTTCACCT TCCTCCCAGCCCA
    ....|||||.||||||.||||||.||||||.|||||||||||||.||||||.||||.||||
    ******AG GGGAGCTAAGTTAGA AAGCCA*************************************
    ......AG GGGAGCTAAGTTAGA AAGCCA..............................
    ..............................................................
```

non-candidate

```
197 CTGAAAGGA CGTCTGCCTTCCCTT GTTCTTGCTGAGGA CAGGGGAACAGAGG GGCTTGTTTCAG
    |||||||.|.||||.||||||||||||||...||||||||||||.||||.|.||.||||||
    ***********************************TGAGGA CAGGGGAACAGAGG GGCTT********
    ..............................TGAGGA CAGGGGAACAGAGG GGCTT.......
```