Supplementary Figure 2
Putative cDNA sequence of KLC1-ALK

Size : 2952
Translation Position: 1 - 2952;
Polymorphism: position 830, rs1670283

```
                10        20        30        40        50        60
        ATGTATGACAACATGTCCACAATGGTGTACATAAAGGAAGACAAGTTGGAGAAGCTTACA
  1      M  Y  D  N  M  S  T  M  V  Y  I  K  E  D  K  L  E  K  L  T      20

                70        80        90       100       110       120
        CAGGATGAAATTATTTCTAAGACAAAGCAAGTAATTCAGGGGCTGGAAGCTTTGAAGAAT
 21     Q  D  E  I  I  S  K  T  K  Q  V  I  Q  G  L  E  A  L  K  N      40

               130       140       150       160       170       180
        GAGCACAATTCCATTTTACAAAGTTTGCTGGAGACACTGAAGTGTTTGAAGAAAGATGAT
 41     E  H  N  S  I  L  Q  S  L  L  E  T  L  K  C  L  K  K  D  D      60

               190       200       210       220       230       240
        GAAAGTAATTTGGTGGAGGAGAAATCAAACATGATCCGGAAGTCACTGGAGATGTTGGAG
 61     E  S  N  L  V  E  E  K  S  N  M  I  R  K  S  L  E  M  L  E      80

               250       260       270       280       290       300
        CTCGGCCTGAGTGAGGCACAGGTTATGATGGCTTTGTCAAATCACCTGAATGCTGTGGAG
 81     L  G  L  S  E  A  Q  V  M  M  A  L  S  N  H  L  N  A  V  E     100

               310       320       330       340       350       360
        TCCGAGAAGCAGAAACTGCGTGCGCAGGTTCGTCGTCTGTGCCAGGAGAATCAGTGGCTA
101     S  E  K  Q  K  L  R  A  Q  V  R  R  L  C  Q  E  N  Q  W  L     120

               370       380       390       400       410       420
        CGGGATGAACTGGCCAACACGCAGCAGAAACTGCAGAAGAGTGAGCAGTCTGTGGCTCAA
121     R  D  E  L  A  N  T  Q  Q  K  L  Q  K  S  E  Q  S  V  A  Q     140

               430       440       450       460       470       480
        CTGGAGGAGGAGAAGAAGCATCTGGAGTTTATGAATCAGCTAAAAAAATATGATGACGAC
141     L  E  E  E  K  K  H  L  E  F  M  N  Q  L  K  K  Y  D  D  D     160

               490       500       510       520       530       540
        ATTTCCCCATCCGAGGACAAAGACACTGATTCTACCAAAGAGCCTCTGGATGACCTTTTC
161     I  S  P  S  E  D  K  D  T  D  S  T  K  E  P  L  D  D  L  F     180

               550       560       570       580       590       600
        CCCAATGATGAAGACGACCCAGGGCAAGGAATCCAGCAGCAGCACAGCAGTGCAGCCGCG
181     P  N  D  E  D  D  P  G  Q  G  I  Q  Q  Q  H  S  S  A  A  A     200

               610       620       630       640       650       660
        GCTGCCCAGCAGGGCGGCTACGAGATCCCCGCGCGGCTGCGGACGCTCCACAACCTGGTG
201     A  A  Q  Q  G  G  Y  E  I  P  A  R  L  R  T  L  H  N  L  V     220

               670       680       690       700       710       720
        ATCCAGTACGCCTCGCAGGGGCGCTACGAGGTAGCTGTGCCCCTCTGCAAGCAGGCCCTG
221     I  Q  Y  A  S  Q  G  R  Y  E  V  A  V  P  L  C  K  Q  A  L     240

               730       740       750       760       770       780
        GAGGACCTGGAGAAGACTTCAGGACACGACCACCCGGACGTGGCCACCATGCTCAACATC
241     E  D  L  E  K  T  S  G  H  D  H  P  D  V  A  T  M  L  N  I     260

               790       800       810       820       830       840
        CTGGCCTTGGTGTACAGGGATCAGAATAAATACAAAGATGCAGCTAACCTACTGAATGAT
261     L  A  L  V  Y  R  D  Q  N  K  Y  K  D  A  A  N  L  L  N  D     280
```

```
            850       860       870       880       890       900
     GCCTTGGCTATTCGTGAGAAAACTTTGGGCAAAGATCATCCTGCGGTGGCGGCGACTTTG
281   A  L  A  I  R  E  K  T  L  G  K  D  H  P  A  V  A  A  T  L     300

            910       920       930       940       950       960
     AATAACCTTGCAGTCCTTTATGGTAAAAGAGGGAAGTACAAAGAAGCAGAGCCGTTGTGT
301   N  N  L  A  V  L  Y  G  K  R  G  K  Y  K  E  A  E  P  L  C     320

            970       980       990      1000      1010      1020
     AAAAGAGCTCTGGAAATCCGAGAAAAGGTTTTGGGGAAGGATCACCCCGATGTTGCCAAG
321   K  R  A  L  E  I  R  E  K  V  L  G  K  D  H  P  D  V  A  K     340

           1030      1040      1050      1060      1070      1080
     CAGTTAAATAACTTGGCCTTACTGTGCCAGAACCAGGGCAAGTATGAAGAAGTAGAATAT
341   Q  L  N  N  L  A  L  L  C  Q  N  Q  G  K  Y  E  E  V  E  Y     360

           1090      1100      1110      1120      1130      1140
     TATTATCAAAGAGCCCTCGAGATCTACCAGACAAAACTGGGACCTGATGACCCCAACGTG
361   Y  Y  Q  R  A  L  E  I  Y  Q  T  K  L  G  P  D  D  P  N  V     380

           1150      1160      1170      1180      1190      1200
     GCTAAGACGAAAAATAACCTGGCATCCTGCTATTTGAAACAAGGAAAGTTCAAGCAAGCA
381   A  K  T  K  N  N  L  A  S  C  Y  L  K  Q  G  K  F  K  Q  A     400

           1210      1220      1230      1240      1250      1260
     GAAACACTGTACAAAGAGATTCTCACTCGTGCACATGAAAGGGAGTTTGGTTCTGTAGAT
401   E  T  L  Y  K  E  I  L  T  R  A  H  E  R  E  F  G  S  V  D     420

           1270      1280      1290      1300      1310      1320
     GTGTACCGCCGGAAGCACCAGGAGCTGCAAGCCATGCAGATGGAGCTGCAGAGCCCTGAG
421   V  Y  R  R  K  H  Q  E  L  Q  A  M  Q  M  E  L  Q  S  P  E     440

           1330      1340      1350      1360      1370      1380
     TACAAGCTGAGCAAGCTCCGCACCTCGACCATCATGACCGACTACAACCCCAACTACTGC
441   Y  K  L  S  K  L  R  T  S  T  I  M  T  D  Y  N  P  N  Y  C     460

           1390      1400      1410      1420      1430      1440
     TTTGCTGGCAAGACCTCCTCCATCAGTGACCTGAAGGAGGTGCCGCGGAAAAACATCACC
461   F  A  G  K  T  S  S  I  S  D  L  K  E  V  P  R  K  N  I  T     480

           1450      1460      1470      1480      1490      1500
     CTCATTCGGGGTCTGGGCCATGGCGCCTTTGGGGAGGTGTATGAAGGCCAGGTGTCCGGA
481   L  I  R  G  L  G  H  G  A  F  G  E  V  Y  E  G  Q  V  S  G     500

           1510      1520      1530      1540      1550      1560
     ATGCCCAACGACCCAAGCCCCCTGCAAGTGGCTGTGAAGACGCTGCCTGAAGTGTGCTCT
501   M  P  N  D  P  S  P  L  Q  V  A  V  K  T  L  P  E  V  C  S     520

           1570      1580      1590      1600      1610      1620
     GAACAGGACGAACTGGATTTCCTCATGGAAGCCCTGATCATCAGCAAATTCAACCACCAG
521   E  Q  D  E  L  D  F  L  M  E  A  L  I  I  S  K  F  N  H  Q     540

           1630      1640      1650      1660      1670      1680
     AACATTGTTCGCTGCATTGGGGTGAGCCTGCAATCCCTGCCCCGGTTCATCCTGCTGGAG
541   N  I  V  R  C  I  G  V  S  L  Q  S  L  P  R  F  I  L  L  E     560

           1690      1700      1710      1720      1730      1740
     CTCATGGCGGGGGGAGACCTCAAGTCCTTCCTCCGAGAGACCCGCCCTCGCCCGAGCCAG
561   L  M  A  G  G  D  L  K  S  F  L  R  E  T  R  P  R  P  S  Q     580

           1750      1760      1770      1780      1790      1800
     CCCTCCTCCCTGGCCATGCTGGACCTTCTGCACGTGGCTCGGGACATTGCCTGTGGCTGT
```

```
581   P  S  S  L  A  M  L  D  L  L  H  V  A  R  D  I  A  C  G  C     600

           1810      1820      1830      1840      1850      1860
     CAGTATTTGGAGGAAAACCACTTCATCCACCGAGACATTGCTGCCAGAAACTGCCTCTTG
601   Q  Y  L  E  E  N  H  F  I  H  R  D  I  A  A  R  N  C  L  L     620

           1870      1880      1890      1900      1910      1920
     ACCTGTCCAGGCCCTGGAAGAGTGGCCAAGATTGGAGACTTCGGGATGGCCCGAGACATC
621   T  C  P  G  P  G  R  V  A  K  I  G  D  F  G  M  A  R  D  I     640

           1930      1940      1950      1960      1970      1980
     TACAGGGCGAGCTACTATAGAAAGGGAGGCTGTGCCATGCTGCCAGTTAAGTGGATGCCC
641   Y  R  A  S  Y  Y  R  K  G  G  C  A  M  L  P  V  K  W  M  P     660

           1990      2000      2010      2020      2030      2040
     CCAGAGGCCTTCATGGAAGGAATATTCACTTCTAAAACAGACACATGGTCCTTTGGAGTG
661   P  E  A  F  M  E  G  I  F  T  S  K  T  D  T  W  S  F  G  V     680

           2050      2060      2070      2080      2090      2100
     CTGCTATGGGAAATCTTTTCTCTTGGATATATGCCATACCCCAGCAAAAGCAACCAGGAA
681   L  L  W  E  I  F  S  L  G  Y  M  P  Y  P  S  K  S  N  Q  E     700

           2110      2120      2130      2140      2150      2160
     GTTCTGGAGTTTGTCACCAGTGGAGGCCGGATGGACCCACCCAAGAACTGCCCTGGGCCT
701   V  L  E  F  V  T  S  G  G  R  M  D  P  P  K  N  C  P  G  P     720

           2170      2180      2190      2200      2210      2220
     GTATACCGGATAATGACTCAGTGCTGGCAACATCAGCCTGAAGACAGGCCCAACTTTGCC
721   V  Y  R  I  M  T  Q  C  W  Q  H  Q  P  E  D  R  P  N  F  A     740

           2230      2240      2250      2260      2270      2280
     ATCATTTTGGAGAGGATTGAATACTGCACCCAGGACCCGGATGTAATCAACACCGCTTTG
741   I  I  L  E  R  I  E  Y  C  T  Q  D  P  D  V  I  N  T  A  L     760

           2290      2300      2310      2320      2330      2340
     CCGATAGAATATGGTCCACTTGTGGAAGAGGAAGAGAAAGTGCCTGTGAGGCCCAAGGAC
761   P  I  E  Y  G  P  L  V  E  E  E  E  K  V  P  V  R  P  K  D     780

           2350      2360      2370      2380      2390      2400
     CCTGAGGGGGTTCCTCCTCTCCTGGTCTCTCAACAGGCAAAACGGGAGGAGGAGCGCAGC
781   P  E  G  V  P  P  L  L  V  S  Q  Q  A  K  R  E  E  E  R  S     800

           2410      2420      2430      2440      2450      2460
     CCAGCTGCCCCACCACCTCTGCCTACCACCTCCTCTGGCAAGGCTGCAAAGAAACCCACA
801   P  A  A  P  P  P  L  P  T  T  S  S  G  K  A  A  K  K  P  T     820

           2470      2480      2490      2500      2510      2520
     GCTGCAGAGGTCTCTGTTCGAGTCCCTAGAGGGCCGGCCGTGGAAGGGGGACACGTGAAT
821   A  A  E  V  S  V  R  V  P  R  G  P  A  V  E  G  G  H  V  N     840

           2530      2540      2550      2560      2570      2580
     ATGGCATTCTCTCAGTCCAACCCTCCTTCGGAGTTGCACAAGGTCCACGGATCCAGAAAC
841   M  A  F  S  Q  S  N  P  P  S  E  L  H  K  V  H  G  S  R  N     860

           2590      2600      2610      2620      2630      2640
     AAGCCCACCAGCTTGTGGAACCCAACGTACGGCTCCTGGTTTACAGAGAAACCCACCAAA
861   K  P  T  S  L  W  N  P  T  Y  G  S  W  F  T  E  K  P  T  K     880

           2650      2660      2670      2680      2690      2700
     AAGAATAATCCTATAGCAAAGAAGGAGCCACACGACAGGGGTAACCTGGGGCTGGAGGGA
881   K  N  N  P  I  A  K  K  E  P  H  D  R  G  N  L  G  L  E  G     900

           2710      2720      2730      2740      2750      2760
```

```
     AGCTGTACTGTCCCACCTAACGTTGCAACTGGGAGACTTCCGGGGGCCTCACTGCTCCTA
901   S  C  T  V  P  P  N  V  A  T  G  R  L  P  G  A  S  L  L  L     920

           2770      2780      2790      2800      2810      2820
     GAGCCCTCTTCGCTGACTGCCAATATGAAGGAGGTACCTCTGTTCAGGCTACGTCACTTC
921   E  P  S  S  L  T  A  N  M  K  E  V  P  L  F  R  L  R  H  F     940

           2830      2840      2850      2860      2870      2880
     CCTTGTGGGAATGTCAATTACGGCTACCAGCAACAGGGCTTGCCCTTAGAAGCCGCTACT
941   P  C  G  N  V  N  Y  G  Y  Q  Q  Q  G  L  P  L  E  A  A  T     960

           2890      2900      2910      2920      2930      2940
     GCCCCTGGAGCTGGTCATTACGAGGATACCATTCTGAAAAGCAAGAATAGCATGAACCAG
961   A  P  G  A  G  H  Y  E  D  T  I  L  K  S  K  N  S  M  N  Q     980

           2950
     CCTGGGCCCTGA
981   P  G  P  *     984
```