DRP-1β alternatively-spliced extra catalytic sequences

>human

SKGEGRAPEQRKTEPTQLKTKHLREYTLKCHSSMPPNNSYVNFERFACVV

EDVARVDLGCRALVEAHDTIQDDVEALVSIFNEKEAWYREENESARHDLS

QLRYEFRKVESLKKLLREDIQATGCSLGSMARKLDHLQAQFEILRQELSA

DLQWIQELVGSFQLESGSSEGLGSTFYQDTSESLSELLSRSCTEEFLAGW

KL\*

>chimpanzee

SKGEGRAPEQRKTEPTQLKTKHLREYTLKCHSSMPPNNSYVNFERFACVV

EDVARVDLGCRALVEAHDTIQDDVEALVSIFNEKEAWYREENESARHDLS

QLRYEFRKVESLKKLLREDIQATGCSLGSMARKLDHLQAQFEILRQELSA

DLQWIQELVGSFQLESGSSEGLGSAFYQDTSESLSELLSRSCTEEVLAGW

KL\*

>rhesus monkey

SKGEVRAPEERKTEPTQLKTKRLREYTLKCHSSMPRNNSYVNFERFACVV

EDVARVDLGFHALVEANDTIQDDVEALVSIFNEKEAWYREENESTRHDLS

QLRYEFRKVESLKKLLREDIQATGSSLGSVARKLDHLQTQFEILRQEFSA

DLQWIQELVGSFQLESGSSEGLGSVFHQDTSEPLSELLSRSCTEEVLAGW

KL\*

>mouse

SKGEARAPEQWKAQPAQLKTKRLREYTLKCHSSMPPNNTYVNFERFAHVV

EDVARVDKGCRALAGAHDTLQDDVESLVSIYNEKEAWYREENENARHNLS

QLKYEYRKVESLKKLLREDIQATGASLGGVARKLDHLQAQFETLRQQLSA

DIQWMQELVGIFQLESENTDSHSLGFMFHRDPSESLSELLNRSHAEEVLA

GLSL\*

>rat

SKGEASVPEQWKTQPAQLKTKRLREYTLKCHSSMPPNNTYVNFERFAHVV

EDVARVDEGCHALAGAHDTLQDDVESLVSIYNEKEAWYREENENARHNLS

QLKYEFRKVESLKKLLREDIQAAGASLGGVARKLDHLQVQFETLRQQLSA

DIQWMQEMAGILQLESGNTDGHALGSVFHRDTSESLPELLNRSHTEGILA

GLNL\*

>American pica

LGGEASTPEQRKTQPPQLKTKHLREYTLKCHSSMPPNNTYVNFERFAHVV

EDVARADQECHALAGTHATLQDDVEALISIYNEKEAWYREENERARHDLS

QLRYELRKVQSLKKLLREDLRATSCSLGGVARKLDHVQEQFEALRRELSA

DLQWMQEVVSSFQPESGCTDKLGSMLRGGAAGTFSQLLSKACGDQVLGGV

QL\*

>cavia

SKDETRAPEQRKTQTSQLKTKRLREYTLKCHSSMPPNNTYVNFEHFAQMV

EDIARVDQGCHALAGTHDTLQDDVETLISIYNEKEAWYREENESARHNLS

QLKYEFRKVKSLKKLLREDIRATGSSLGRVARKLDHLQAQFEALRQELSA

DLQWVQELASSFQLESRNADGLGSVLPWDTSESLSELPSGSHTEEVLASL

KL\*

>rabbit

SGGEASAPEQRETEPPQLKTKRLREYTLKCHSSMPPNNTYVNFERFARVV

EDMARVDEGCRALAGAHDTLQDDVETLISIYNEKEAWYREENESARHDLS

QLRYEFRKVESLKKLLREDLQATSASLGGVARKLERVQEQFGALRRELSA

DLQWMQEVVNGFQLEGGRTDGLGSVFHGDASESLSELLSRVCSEEVLGTV

QL\*

>cow

SKGEIRAPEQHKAEPNQLKTKRLREYTLKCHSSMPPNNTYINFERFARVV

EDVARVEQGCRALTGAHDTIQDDVETLISIYNEKEAWYREESERARHDLS

QLRYEFRKVKSSKKLLREDIRATGSRLGGAARKLDHLQTQFETLRQELSA

DLQWLQELVGSFQLESGSMDSPGSVFCRDASESFGELLNRSCGEEVLAGL

KL\*

>horse

YKGEVRAPEQRKTEPVQLKTKRLREYTLKCHSSMPPNNTYVNFERFTRVV

EDVALVDQGCRALAEAHDTIQDDVEALVSIYNEKEAWYREESESARQDLS

QLRYEFRKVESLKKLLREDIQATGSSLGSMARKLDHLQVQFEALRQELSA

DLQWIQELMGSFQLESRSIDGLGSVFHRDTSESLVELFNRSCSKEVLANL

KL\*

>pig

SKGESRAPEQRKAEPAQLKTKRLREYTLKCHSSMPPNNTYVNFERFARVV

EDVAQVDQGCRALSEAHDTIQDDVETLISIYNEKEAWYREESERARHDLS

QLKYEFRKVESLKKLLREDIRATGSSLGNTARKLDHLQAQFEALRQELSA

DLQWLQELVGGFQLESGSMDRLGSVFHPDTNESLVELFSRSCSKEVLAGL

QL\*

>dog

SKGEVRAPEQQKTEPAQLKTKRLREYTLKCHSSMPPNNTYVNFERFARVV

EDVARVDQGCRALAGTHDTIQDDVETLISIYNEKEAWYREENESARHDLS

QLKYEFRKVESLKKVLREDIQATGSSLGSMGRKLEHLQAQFEALRQELSA

DLQWIQELVGSFQQESRNTDGLGSVFHRDARESLVELLDTSSSKEVLAGL

KL\*

>bat

SKGEARAPEQRKTEPTQLKTKRLREYTLKCHSSMPPNNTYVNFERFAHVM

EDVAWVDQGCHALAGAHDTIQDDVEALVSIFNEKEAWYREESESARHDLS

QLRYEFRKVESLKRLLRKDIQATGSSLGSMARKLDHLHVQFEALRQELSA

DLQWLQELVGSCQLESGSTDGLGSVFCRDAREPLAELHSRPGSDKVLAGL

EL\*

>opossum

SKGEAKALEPRKTEPPQLKTKRLREYTIKCHSSMPRNNTYVNFERFARVV

EDVADVEQSCNTLATAHDSLQDDVEALLSIYNEKEAWYREESENTRYSLS

QLKYEYRKVEAMKKALREDIQTAYSDLGSVAGKYAQLGTQYEALRRELSE

DLRWIQDLMSDFQQEKGSEESLGSDFNRDVNTSLMELLNRSCSEDFLAGL

KLRVTESSQ\*

>platypus

LGGETKIPDSRAARPAQFKTKRLREYTLKCHSSMPPNNTYINFERFARAV

EDIAQAERGFSALVESRGALQADVDALVSIYNDKETWYREENENVRRDLS

RLRYEHRKVESKKKHLRDDIHGIGSRLGSVSDKYVHLGSRYESLGRELAD

HLGWIQDLMSSFQLEGRDGGCGGGNCDSVLSKDANESLMELFNRSLGQEF

LAGLKLHGADSSQ\*

>chicken

LKEETKVEENKKAENTQLKTKRLREYTIKCHSSMPPNNTYINFERFARVV

EDISFMEREVSTLAASHDSLQEDIDALVSIYNEKEAWYKEENESVRHKLS

QLKYEYRKTESLKRHLQDDIKTVGASLTVITGKYAALQSQYESLSQELSE

DLKWVQDLMSNFQLENGNEACVNGNFDSVFNKDINESLTDLLNRSCCEEF

LAGLNLSVAESNQ\*

>finch

LKDETKVQENKKVENTQLKTKHLREYTIKCHSSMPPNNTYINFEHFARIV

EDISRVEQGFITLAASHNSLQEDIDVLLSIYNEKEAWYKEESESVRHTLS

QLKYEYRKMESLKRHLYDDSEAVSASLAGMCGKYAELQSQYESLRQELSE

EIKWIQDLMSSFQRENETCVNGNFDSVFNKDINESLMELLNRSCCEKFLA

GLNLDATVSHQ\*

>frog

SKEETKIHGTKRTAVRQLKTKRLKEYTMKSHSSMPPNNTYVNFERFAQVV

QDLSSAENEFSTLAMNYDSLQEDVEALISIYNEKETWYKEENENVRHELS

QLRYEYRKVESMKRSLHYDISSVQSGLGSLSGRYADLQSRYDSMRQELSE

DLQLIQDLVDGFHGEDAGYCGGNFASVFTRDLNESFMDLLNGSCSQDLLE

GLKIQITDSQM\*

>1\_stickleback

SCDHMEEESAALEAEKKAEQLKTKRLQEYTIQSHSSVPHNNTYANFERFA

HVLEDVSLMERGLSEVAVAHHSLQGDIEALLTIYNDKESWYKEESETARK

HLSQVRYEFCKVEATRRLLQEDLKSMDASLESISGKYDHRQSQLDALRQE

LSTELRWLEEVMGSLQHGRGQQQQGEYAIRNEGSAASVLQEGTEH\*

>2\_stickleback

PNEHKEESKAQEPKKRERRQLKTTRLREYTIKSHSSMPPNNTYVNFERFA

QVVEDIDHMEGSFASLASAHDSLQEDIDATVSIYNEKEAWYKEESEGVRH

ELSQIRYEFRKVEALKRSLQDDMRAFGSGLGAISARYRERQSHFEALRLE

LANELKWVQDVMGSFPTDGGGGGGGGYPGCSFSPVFNDDVNEALKELLNR

SRGGELLTGINLDLEPGQQR\*

>1\_pufferfish

SRGPVEENSAPADAEKKAEPLKTKRLKEYTIQSLSSTPQNNTYANFERFA

RVVEDVSLMEMGVSEVAEAHCALQGDMEALLSTYTGKEAWYKEESESARK

HLSQVRYEFRKVEAQRRQVQEDLQDIEAGLGSISGKFSQRQGQLDSLRLQ

LDSELQWLQEVMSSLHPEGPEGVLSGGLDTDVKQALAELLHRSCRGELYP

EARPKLTETG\*

>2\_pufferfish

SNEHKEETKVVDLRKRERRQLKTKRLREYTIKSHSSMPPNNTYADFERFA

QVVEDIEQMESALVSLAAAHDALQEAVDAAASACHQKEARYKEESEGVRH

ELSQIRYEFRKVEASKRSLQEDVRAFSSGLAAVAGRLRERRAHFELLRAE

LSHELAWAQEAMGSGPADGGGGCTSSAALNNDVNEALKELLSRSCEGDLL

SGIHPELDLETNKR\*

>1\_fugu

SRGPVEENSAPADAEKKGEPLKTKRLKEYTIQSLSSMPQNNTYANFELFA

HVVEDVSLLEVGISEVAEAHRTLQGDMEALVSIYTGKEAWYKEESESARK

HLSQVRYEFRKVEAQRRQLQEDLQDVDAGLGSISGAYSQRQRQLDSLRQE

LNSELQWLQEVMSSLHPERSGAVLGGGLNTDVKQALAELLRHSCRRELRP

EAKQKLTESG\*

>2\_fugu

SNEHKEENRVVDVKKRERRQLKTKRLKEYTIKSHSSMPPNNTYVNFERFA

QVVEDIEQMEGSFVSLAAAHDSLQEDVDAMASVYNEKEAWYKEESEGVRH

ELSQIRYEFRKVEALKRSLQDDVQAFSSGLAAIAGRYQERQKHLELLQAE

LSRELKWVQEVMSSCPVDGGGGGYGCAFSTALNNDVNEALTELLNRSRGG

DLLPGINLEFDIETNKR\*

>1\_medaka

SSGHMEEESSQCVTQKNGEKLKRTSLNEHGVLSLSSTTQNKTLFERFPLL

WEDISLIQTGLSVSADTSSFLQRDTEALLSTCNEKEAWCKETSESVQKLL

SQTCCDFQTMKATRLLLLEDVKNIDASLGSVRSDYSYRLDQLEALQQKLK

SEQLFLNPAGARSSF\*

>1\_medaka

SSGHMEEESSQCVTQKNGEKLKRTSLNEHGVLSLLSTTQNKTLFERFPLL

WEDISLIQTGLSVSADTSSFLQRDIEALLSTCDEKEAWCKETSESVRKLL

SQTCCDFQTMKATRLLLLEDVKNIDKSLGSVRSDYSHRLEQLEALQQKLK

SEQLFLNPAGARSSF\*

>zebrafish

SNEHKEDRNKAPERKRERRQLKTKRLKEYTIKSHSSMPPNNTYINFERFA

QVEEDVSAMEGTFCQLASAHDSLQEDIDALVSIYNEKEMWYKEESESIRH

ELSQLRYEFRKVEAQRRGVHEEMRSVDASVNRVSEKYKERQSRFDALQKE

LCTELQWVQEVVGSFQVSFPNCSFSSVFNTDVNEALKELLNRSCGGDLLT

GNNLDQQR\*