

6132-sequence listingPCT.txt  
SEQUENCE LISTING

<110> UNIVERSITA' DEGLI STUDI DI TORINO

<120> PAD2 FOR USE IN PREVENTING AND/OR TREATING OR DIAGNOSING INFECTIONS CAUSED BY VIRUSES OF THE HERPESVIRIDAE FAMILY

<130> 1013-16

<160> 14

<170> BiSSAP 1.3

<210> 1

<211> 52693

<212> DNA

<213> Homo sapiens

<220>

<223> PAD2

<400> 1

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## 6132-sequence listingPCT.txt

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## 6132-sequence listingPCT.txt

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## 6132-sequence listingPCT.txt

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## 6132-sequence listingPCT.txt

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## 6132-sequence listingPCT.txt

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## 6132-sequence listingPCT.txt

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gcctgcccct atgacctcac ctaaccttaa ttacctccta aaagctctat ctccaaatac	13080
catgacactg aggggtgaagg cttcagcatg ctaatttgagg gagagacaaa cattcagtac	13140
acagcagcca gatcacatcc atttgttctc ctgctctgaa atactttcgg agttcttgaa	13200
tttcggaatt caagaattcc aaaagtatct gctttgcaat ggaaaaccac ttttgaaccc	13260
caagaaatga ctcagaagggt gggggatgtc aggtggcaag aaagctgtgg caggaaggaa	13320
gggatctttg taacaagaga caccacacct ctgccctgtt aggaccagc cactgggctc	13380

## 6132-sequence listingPCT.txt

catccctgtg aggactcagc acttttactca gcgaccctgg gcagggagac agggttccag	13440
gcccagctct gctagtggag caaattcatt cctgcctggg tctccatctt ccaccttcac	13500
aggaccctgt ggctcccaaa actggcctcc catcagaggc actaggaagg ttgttaagaa	13560
ttcagatccc caggcccgac cctcatacat tcacactcag gaggtgcaag attggcccaa	13620
gagatttcat gttcaacaga tgtcctcttc acagccaggt gactgcaatg cagctggccc	13680
ctttggggtc tcccagatca gattacctgt gggggccctt gcagacttgc ccctccagaa	13740
gtcttctttt ttgaaaaaag agccgggcgt ggtggctcac acctgtaatc ccagcacttt	13800
gggaggccaa ggcaggcgga tcacctgagg tcgggagttc aaaaccaacc tgaccaacat	13860
ggagaaaccc catctctact aaaaacacaa aattagccag ctgtggtggt gcatgcctgt	13920
atcccagcta ttcagaaggc tgaggcagga gaatcgcttg aacctgggag gcagaggttg	13980
cagtgagccg agattgtgcc attgcactcc agcctgggca acaagagtga aactctgcct	14040
cacacacaca cacacaaaaa agaagagaca gggctcttgct ctgttgctca ggctggagtg	14100
cagtggcaca atcatagctc actgcagcct caacctccca ggcttaagca attctccac	14160
ctcagtctcc taagtagttg ggaccacagg tgtgcaccag catgcccagc taatttttta	14220
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tgattctcgg gctttgacct cccaaagtgc tggaagcagg agtctcctct tgaagcccct	14340
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cagccggggc ccaaaccttc agcctgaagc actcggaaca cgtgtgggtg gaggtggtgc	14460
gtgatgggga ggctgaggag gtggccacca atggcaagca gcgctggctt ctctcgcca	14520
gcaccacct gcgggtcacc atgagccagg cgagcaccga ggccagcagt gacaaggtac	14580
cacggcggga agtccagcct ctgcgggccc gggaccatgc caggatagag gcagggtgga	14640
ccagccctgt cccatagaaa ctgcacgtgg gccatgtgtc attttcagtt ctgcagtaac	14700
cacattgaaa aggcaaaaag aggccgggcg cagtagctca agcctgtaat cccagcactt	14760
tgggaggccg aggcgggtgg atcacaaggt caggagatcg agaccatcct ggctaacacg	14820
gtgaaacct gtcttacta aaaatacaaa agattagcca ggcatggggc ggggtgcctgt	14880
agaccagct acttgggagg ctgaggcagg agaatggcgt gaaccggga ggcggagctt	14940

## 6132-sequence listingPCT.txt

gcagtgagcc gagatcgcac cactgcactc cagcctgggc gacagagcga gactccgtct	15000
caaaaaaaaaa aaaaaaaaaa aagaaaaggc aaaaagaaac aggtgaaatt aattgtctta	15060
atatctatta cttaaccta tctatcaaaa tattatcatt ttgacatgct atcaatataa	15120
aaaatattaa caaaattggt tgttttttgt ttgtttgttt gtttgagacg gagtctccct	15180
ctgtcaccca ggctggagtg cagtgatgcg atctcggctc actgcaagct ccacctcca	15240
ggttcacacc attctcctgc ctcagcctcc agagtagctg ggactacaga cgcctgcct	15300
atgcctagct aatTTTTTTT tttttttgta ttttttagtag agatgggggt tcaccgtgtt	15360
agccaggatg ctgtcgatct cctgacctg tgatccgcc accttggcct cccaaagtgc	15420
tgggattaca ggcgtgagcc accgcggccg gcctgtttgt ttgtttttaa gagacaggat	15480
ctcactctga ctcccaggct ggagtgcagt ggtgcgatca tagctcactg caacctcaag	15540
ctactgggtt caagcagtcc tcctgcccc gcctcccag tagctgggac tccaggcacc	15600
tgccatcgtg cccagctaatt tttttttttt ttttttttta gagacaggtc ttactatatt	15660
gcccaggctg gtagtttata ttctttttcc ataccaaatt taaaattagt gtgagtttta	15720
caccttataa cacacctccg ttcagaatag ccgcatttcc agtgctcggg agccatgtgg	15780
atgttggtgg gttagaccat ggaacgatgg cttcgtaaag gatgaaaatt atagacagct	15840
gagtgataga aagtttagag gctcagaacc atagaatcat tggagcttac agtcacaagt	15900
gtccttggtc tatctgtaaa atgggggtgct gaacatccat gggtgatttg cctaagtgg	15960
gaggctgaga ccagaactgt ctcctttctg ggttccgtaa ttatgaactt taccatgtgc	16020
cccatcacag tgatggcatt gaacatggtc caaagaaaat agcctcagcc ctgtcccctc	16080
agtgggcact agacgtgcaa catggcagat atgggggacc ccaggcagca gaatgcacac	16140
agtggcacag gaaggcagac agcatcctaa ctgccctctc agccagcagg aggggagtcc	16200
acagtctagt tcagttacct gagggaaacc gcccaccaac ccaggagttc ttcttgagg	16260
agagggttct gatgtttgga gagggttggc ttgacaagct gtgagggaca gcagttgctt	16320
caggttttcc tgcttgatgat ctgtgatctc tgctctcttt tctctctact ccaatgtgcc	16380
ccctccccac caaggtcacc gtcaactact atgacgagga agggagcatt cccatcgacc	16440
aggcggggct cttcctcaca gccattggtg agttggcatg gttgccgtct cagtgccttc	16500

## 6132-sequence listingPCT.txt

atcacccagg gcctggcact gttgtccttc tctggggcac ttaggcggtt ctcaagtgcgg	16560
ctgacctggc acttggagct tcttctgaat ggcacaggcc tggggaggga tgtcacatgt	16620
gccccacccc ggtccttcca tactgggggtg ggggcttatac tgcaggaaga ggcactccct	16680
gatccatcag caaccccccc ccaagtgtca aggtcccctt cccaggctct gtggccctaa	16740
aagagaaaaa ggtgaagtgt gtttccccct gcctctcccc tgcagcctgg agaagagtgt	16800
ccctctcatg gtgaggggaa tggccacagt ctataaaact agcagctgtt cttgacaatc	16860
ccagctgccc cctggttctc cccagattca gccccgaggg tgcagagatg cagcctccag	16920
gtccttaact cacctagtcc aagtccttca tttgatccac aggatggtga ggcccagaga	16980
ggttagggaa tttattcaac atcacacagc aactgggtgg caagttgagt ccagaaccca	17040
gaattatccc tgtctcaggt tctctccatt gcatcacact gccctgcgct ggggtgccagg	17100
cctgcatgcc agggaggtgg agcctagcct ggctctacag gacccttggc tgtgatcatc	17160
tgaattttcc atcactccac cccctgaaac tgaggcatta cttttatgct attttatttc	17220
attttttaat catagaatgt taaagccaag aggacatttc agagggtcat tttgttcac	17280
caaccttggg ttaacattga cagagttgcc gcatggcaga ggaagggaac taccagttat	17340
tgagagtcaa ctgcatgctg agtgctttca aaataatgat gcggcctgct tattgcaggc	17400
ctactgtgtg tctagagctg cactgggcac tttgatgagg aggaggaggg ggagaatggt	17460
aaacacctga tattaattga gcacctatgg tgtgccaggc tccagtactc aatgttttac	17520
cgtcacgatt tcaatctctt cttccaacta ttccaaggat agatattatt attatcatcc	17580
tcattttata gatgagaaaa tcaaggctca gaaaaggtaa aacaaatact tgcctgcagc	17640
tacatctcca gaaaatggtt ggtgagatgc caatcattcc agttatccca cattctcagg	17700
gggggtctca gaatctcccc aagatacaac taactcccga gccagcccct tcctctctag	17760
ccctgtgctc tcagctgctt aaacaggctt agcagcaggg cccttctcat tcttggctaa	17820
ttcccaaagt ggcttggttg ctggtcccc tgtccctctt tctgtcccaa ggaggtgccc	17880
agccctgggg tagggaacct cgggatgacc ttggtgaggg tggcagatga tcaacaaaga	17940
ctcctgggtt gtactgagcc ctggcacgtg tgtgaacctt gcatgcacac agcatccagg	18000
cagtctcaga tgacagtccc tgaggaaacc taatcccacc aagataggga cacctgagga	18060

## 6132-sequence listingPCT.txt

cgggggcagg aagggcaggg gcctgacacc tgtcaaataa ggatgatccc agaaggctga	18120
ctgcaccatt aacaagactt ccaccaaagc aagacagact taggatagat ggcaaaataa	18180
gcgtctataa ggaggcagga ctggactttt cctcctcact aggagatgac aaagctgtgc	18240
ttagaggaag cccgctcaga gttggcggca tggctgagtc ccaaaagatg ccacatgtgc	18300
ccacgacaag tgaccaagtt catccttccg aggtctgtta ataattattt atttaactgc	18360
cacaagttcc agatatttag attccatggg ccaatcaaata gtcccctgcc cccaccccc	18420
aaaaaatgag aacactaaca actttgatgc ttggcaaaaa aaagaaaaaa aaatacatca	18480
ataaaacaat ttgtggccag gcgcggtgtc tcacgcctgt aatcccaaca ctttgggagg	18540
ccaaggtggg cagatcatga ggtcaggagt ttgagaccag cctggccaat gtggcgaaac	18600
cacatctcta ctaaaaatac aaaaattaac tgggcgtggg ggacgcacc ttagtccca	18660
gctactcagg aggctgaggc aggagaattg cttgaaccca agaggtggag gttgcagtga	18720
gccaagatgg tgccactgcc ctccagcctg ggacgacagag cgagactttg tctcaaaaaa	18780
aaaaaaaaaa aaatttgcta tcaactatca ctatcatttt aactcttaaa aaataggcaa	18840
ggcataatct cagaataaaa gacagtcatt gccgggcaca gtggctcacg cctgtaatcc	18900
cagcactttg ggaggccgag gtgggcggat cacctgaggt caggagttca agaccagcct	18960
ggccaacatg gtgaaaccct gtctctacta aaaatataaa aactagccgg gcatggtggt	19020
ggacgcctgt aatcccagct actcaggagg ctgaggcagg agaattgctt gaaaccagga	19080
gacagagggt gcagttagct gacacagtgc cactgcactc cagcctcggc gacagaatga	19140
gactctgtct caaaaataac aaaaaacaaa aaaaaaaca gaataagaga cagtcattca	19200
attgcaaaaa gaaactaaca ccattgaact tctgtttcct gttccaacag agaccctggt	19260
gaaaatctgg tttcccttgg ggaccactgt tctctctgtc ctttctaggt tttctctttt	19320
ctcgagcatc tgccccagga gcccttgagc ccgtcatcct gagtaatcaa tcactcaggg	19380
gcagcgctc agaggcaagc cccccccaa cccaatatc ttgagaggct gggactgtcc	19440
cctgggcaca aaaatgtatc tgaatctctc tcaccctggt cctatcctga gtccacattg	19500
agcagaaaaga gccttggctt ctgggtagac agaagtaagc ctaagatctt tctctgtccc	19560
ctccagccag cttgtgacaa gtcacatcat cccctgagc cttggcttcc tcatctataa	19620

## 6132-sequence listingPCT.txt

aatgcgcttc acagagcagc cttgcatggg gtttacaagg attcagtggg atgttgtgtg	19680
cgaagggccc ggcacagagt ggggtgcttag tcaatgctcc gcctgctttt ctctcttgct	19740
cttgaggtgg ccgcattttc tctctgcctg ggtgaagtta aagaaatgta tggctctctcc	19800
ttcttccttc tgggatttgg gagcaaattc atgattcctt tggccagatc aggctctggg	19860
tctttgtccc aatcccgcca aggacttgct gtgtgacctt aacaagtaac cccccccact	19920
aggactcact ttttacaac tataaaataa ggggtttgag ctaattaatc cctaaggacc	19980
ttcaagacct tggtaggggt tgatttgcaa agacttccat tttttgggag ggatggggga	20040
gagcaagagg tgaggtgtgg ggagggagga agaatccac cctatttgag gtcctggcag	20100
tggaaggagt acacatatgc gggccccaga aaattttaac atcaacctaa ggggcttgat	20160
cctatgcctt ctccccagag gctgggatac ttgccctgat tggctgtggg ggagggtgtc	20220
cttccttccc ataacatctc aagctgctta gtaaggcaag aaggccaggc accctgccac	20280
tctctggcga ccctccaaaa tgcttgtgcc tctcggtcag agctgaggct tcagtgtctt	20340
cattctcagg gcagactgcc ttgaaccaa tcctaggagc atttcccgtc aatctgcccc	20400
acaccagga gccacctgac gccttggggc tattctgggg aactgagggt ggatccagag	20460
cctctgggaa atgtcgtctg gagcctggag gccctgaagc agagctcctc tccctcctcc	20520
ccctcgggaa ggcagagcca tccaagagg caatgctctg ggcagggtcac accagccctg	20580
ttctctgccc ctacccgcag catcccactg gaatctagtt aaatcagaca ttgggggaag	20640
ccttgagggt gcgaagtccc atgggcatga ctacagggtg ggcggtctct gaggggtgaag	20700
gggccagaag gtcatttcag tggattatgg ggacagggtca tgggtcatca gagaggagtt	20760
atgaagccct gtgagaggct gggaggacga taaggagacc acactgtgaa atgcccacat	20820
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catgagagag gttgccttag gcagctgaga agaagggtg gacaaggaac tgctgtcttt	20940
ctttagaaac agtgtgttac tattttatct gattttgttt gtactatgtc caaatattac	21000
atgaataaaa tgtttccatt taagaattca taatgaaatg aagcagtata gactgcacca	21060
taatttctct cctagccac ggccccactg ctttaatgga ctgccacaa ggagtcccaa	21120
tgtaatgtca ccttacggcc tagagacgaa ggccgcaggg ctaccaaggt ggggaaatgg	21180

## 6132-sequence listingPCT.txt

gcacttcctc tgggaatgac cttcaaggga gcaagtcttg tgtctttgac tttgggctgg	21240
gcttttggaa acagcttgca gggaggtcag cctgggttca ttgcaggga cagcagagag	21300
caggcagccg gagtccgagg ccctgctgag agcctggctc tgcgttctgg gaacttcggt	21360
ggtcacttcc ctgctgcggg cctgggtttc ctcatctgta tcgttagggg gtgggggtgg	21420
tcacgcctcc cctggagtgg ccgagagaac acaccttga aaacgctgtg cagctgcaga	21480
gcaggatgcc cgcaggggag aaatttttac cttgaaaagg acagagtggc tccctaaaga	21540
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gcattcagtg gacgtgaccg gctggaaagt tcacaaaggc ccaggaacca aaaccagtat	21660
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cctgggggtcc ttatcctgca ccagcctccc agattaccag cccgatttgc tgacaagtgg	21780
cttctctgaa cctgggtttg ctgccctgtg aaacgagagc aatgctattc atctcatggg	21840
actgtggacg ccttgagagc aggtgctgtg cctccattgc ccgttgctg gtacagctcc	21900
cggagcagta gtcctcagc agtgaaatgt ggagtgaatg cgatcggagg gaggaggtta	21960
caaattatgc cttacagcac ctaactcacc gcacagctgc agaggctggg acacacaaga	22020
ctgcctctct caagggccag gcgcccttgc agcctccttc tagactggaa aagtcacatg	22080
caggcttagg gtatgcaggc tataggcaaa gggaggacct gaatgtgatc tctggactct	22140
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accacccagc gcccaccagg tccaagtcac gctcagcgtg agatgagccc actcgggcag	22320
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gtaggtagaa gccaggagt ctgttaaaca tcctacaatg cacaggctgc cccacacaa	22560
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aaccaggaag ggccccatgt tacaagttag gaaactgggg ctgagaggg tcctctaacc	22680
tgcccaaagt cacacagctt ataagcagag aaccagggtc taaacccac cttgtctgat	22740

## 6132-sequence listingPCT.txt

actaaacctt ttcacttccc tacagtctcc acaaagcctg tctccatggc aggcctaggg	22800
atgctgaggg tcccttcacc aagagaaggg ataagtgggg gcctggccct ggatcctcca	22860
tctagactca caggtgacct cagaccaaga ggggttagag acagcttccc acccacagta	22920
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acgcacaccc aggtgcacat gtgcacacct atgcgcatgc ccgggtagac tgagaaaggc	23040
agtttgggaa tgctatccct gttaagtttt cagaatatga actatgaatc agaccaaccg	23100
caactgtgtac cccagttctg ctagcgtccc tatgtgatct tgggcatgcg acttcacctc	23160
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tgaagtggta ggaggtccca gacctccccg atggcagctc ttgcagccgt aagctacgag	23280
gtccacacgg tgtctgctga cggctctccag tgggtagtgg gatgttgagg caggggggttg	23340
cataagatga cttcagcgag gtcctctctt tcccgtgacc aaatgaatgg ctgagacgca	23400
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tcacccatgt ctcttctccc cagagatctc cctggatgtg gacgcagacc gggatggtgt	23520
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cagggcttcc gagggcacag ccccagatcc cgcaggcaat tcccatttca cagctcagga	23640
gactaaagcc caagacaggc tcccagacac acagcatacc aatgatggaa cccacagagg	23700
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ccatgatggg gacgccaat tcatggaact gctgggaagg ataaatgtgc ccgctacaga	23820
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tgggggagac agaccctcag gacagagggt cgcattcatc attctcagtt ccaggcgtgg	23940
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cactcccatc ctgctcccc acagaggacc attttgctgg gtttaaatgtg tctctttctg	24120
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agacggcatg gtgttctcca tcacattctg ttttgtactt ttccctcaac ctagttttta	24240
ggctccatca gtcttgctct gtgtacattc aggctgttgc ttctaactgc tttccatttt	24300



## 6132-sequence listingPCT.txt

ctgcccttct gtattatctc aatttttgcc atgggcatat gtgactttta taataacact	24360
ctgaagccta gagtaaagta tacatagagg ggtacttacg aagtaaaata aacacagcct	24420
gatgagaagc ctgggtccta gcagcctgct accctgactc tctgcaggtc aggagagggt	24480
tctcagccat gtggggaagt cccttcttct aggatcgtga gcaaggcttg cctgagacca	24540
gggccagccc tgcacactca ttctctgagt ctatggccaa gccatatgag aatgaactcc	24600
acagaggcct ctgaaaccca gcagccccag ggcgacagct tccaacctcc cccaaggggc	24660
tgggcagtct tgggaaagtc acacgatccc catgagcctg aacttggcca gaatttttaa	24720
atctgggccg gtgaagtttt cacattttct tcactcatcc cataaatatt tgctgagcat	24780
cttttatgtt ccaggagcgg gtcaggccca ggggacacag aaagaacaag agaaacacag	24840
ccctggcctt aaggagccca tgggtccacat taaatatgga gtgtttcgga tagctgtgtc	24900
atcacagttg tcctaagtcc tcccaaaaag gatgtgtaca gggccagggtg tggacccggg	24960
gaagctgctc tgtcctagag aatcagaaaag gcctccagga agaagagaca gtcatgctgt	25020
aaccgaggaa gggtagagtg ggccagggtg aaaggggcag gacaggagca gagggactgg	25080
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ggcagagtga gcgaggggca aggcggagga gatgagacag agaggaaggc aagtttcacc	25200
aggccttcca agccacagca aggaatcagg gcttcatgcc aactcaactg ggagcccctg	25260
acctggctta aagcaggga gcaacacaat ctggcccag tttgttctag tagtgctatg	25320
gctgcagtgt agaaagtgga gcaccatgca ggtcccatc ggagcactag gagcgtgtct	25380
ggaaacagct ggggtggcatc catccaggcg tctcctcctg agctccccta gggacctagg	25440
gacctatggt agaattgtctg tctgctcatt tctctggcca gcctccacct ccctgcctcc	25500
acccacacca gacaccagct gcaccagaca ggaggcccat aaatgcctca gtcagccttc	25560
ctgtctctgt gcctctattg aacttgccct tgatgcccac attcatcctc tgttgacatc	25620
agtcttgaga ttcacatttg ccaggtcaca gctgccccag tgggtggcgg ctactcttta	25680
ccctcatcct ggggctatct ctccagtgtc ccatgggggtc tatacaagca tagagaagag	25740
ggcactgacc tttcttcctg ccactgtagg catcctggac ctggggcccc gagggccagg	25800
gggccatcct gctggtgaac tgtgaccgag agacaccctg gttgccaag gaggactgcc	25860

## 6132-sequence listingPCT.txt

gtgatgagaa ggtctacagc aaggaaggtg ccagcaggcc ctgcacttgg ggggcaggat	25920
gagaggagtg aaaagattca tgcccagtcc tgggctgggc tgagggtgag gcaggtgtgg	25980
actcaggcct cctggggatg gtggacacaa attcccactc ttgcttaaag ccaaaggcaa	26040
aaccatagga aatagacaag ggccgggctg ggtggctcac acctgtaatc ctagcatttt	26100
gggaggccaa ggcaggcaga tcatgaggtg aggagttcaa gaccagccta accaatatgg	26160
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cagtgagcca agatcatgcc actgcactcc agcctgggca acagagcaag actctgtctc	26340
aagaaaaaaaa aagaagaaga agaagaagaa gaataaaaag aaaatagacc agaaggaaat	26400
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gctttgcttt tttctttttc tttttttttc tttttttttt tttttgagac aaggccttgt	26520
tctattgccc aagctggagt gcagtggcat gatcatagct cactacagcc tcaacccct	26580
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tacagggtgtg agccacagca cccagcctct ttatgctttt ctatagtttc cataatacac	26820
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caacagatag atctcttcat tctcaccttc tgtccctcag atctcaagga catgtcccag	26940
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atttccatgt cagactcaga caaagtgggc gtgttctacg tggagagtga gtgatcccag	27060
cccagtccag cctagacctt tctagccacc taccctcctc cccttagcag ttgtggcctt	27120
cacagggtgca ggtgcctggg gaagacctgg attggtctct gagtgattgt aacatggcaa	27180
tgctgttgtc ccgtgaagtt gaaagactcc atggggacac atcgctcctc ctctcaaagg	27240
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gaggaagggc atttgggcac ttcttttctg gagtcatgtc accttcagga tacctgaggc	27360
agggcaggca ccacctccag gtattttctg ccatctctga ctttcaaaga cccctaaag	27420

## 6132-sequence listingPCT.txt

atgcagtggg cacccttgaa gagttgacct cttgctcctc tcgatggcaa cagatgtcct	27480
gggccccac tgtgtagggc acgggctcct gccctggagc tagtcctcgt agctgccggc	27540
tctgcctcac cctgtctgtg gatattgtgt gagccctttg gtgccaggcc ctgtttctcag	27600
ctttgagatc tctgcagtaa acacaacaat cacaccctgc cctcaaggag ccgccagtct	27660
agcaagagag acataatcag taccacaatt ggaggaaatg aaatagaata agtgaggaga	27720
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catctgagct gagactcaga tgaacaataa gaaggaacca gccactcgtg agctgaggga	27840
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gtgtgggaag agcagatgga agcccagagc agggctggga gtcaagggtca gtcagctcgg	27960
ccagggggcca gagcatgcag actgggtttg gatcttcttc tgagtgcaat ggaatgccat	28020
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acctctagac aggcctacta gatccagggc attcaccatg aggtgagtag ggaccctgga	28260
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ggaactacta ccacaagggc tttgagaacg tcccttgag cctcttattt gggctgccc	28740
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cacacacaca caagcaaagg acgacagata attgaccagg agcacagtct ctttttcttc	28920
caggcaaaca ctttgaggtt atgtcaaatt ccaggcacc ctgtggatga gcgaatgtca	28980

## 6132-sequence listingPCT.txt

ggtgtcctgg tagggtcaga ccagctctcc ccaaggccag ggggctgggt tggagactga	29040
aggaccccta tagggagtgc tggagtcagg gagctacaat tctgggtcca ggcaagtctt	29100
ctcaccagcc ccagccttgg ggtgctcatc tctgacgtgg catgggagta gtaagagttc	29160
cgactgtccc ggggtgtcccg gatcgtgggtg gggatctaata gaggaaggtg tgtcaggcac	29220
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aaggcacgag gaccactcaa tagagcggca ttgttggttc ctgcagagaa agctggccac	29700
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gaaagcagcc cagaatagag gtgcattgtg aatcacaggc cacgggccac atcgggaggg	29880
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gctttggctg tgtggcttct gccaggacaa gttggcttct aagcctgact gtcccctgag	30060
catcagttca agtgcagcct ggggcctgtg ggcatgggag ggcccagtg cctggaggaa	30120
aatgttttca tgatgccagt ctatctgaaa ctactgactg acagggtgc aggggtgcaca	30180
ctattgtttc tgggtgagca ggacctcact ttctattctt tgggactttc agtatctgaa	30240
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tccctgcctt ctgtttggaa actattcaat gaaaactcct tcacatcctc gtaatacagg	30360
tccaagcagt gttactgatg gttacccatg gttactgagg ttactgaagt tactgagcct	30420
gtgtcattta cattgaacct gtggcgtggg tatcattatc tcccacttaa cagatgagta	30480
aactgaggct cagggaggtt aagtgaattc tctgaggctt ggtttttttt tttttttttt	30540

## 6132-sequence listingPCT.txt

tttttttgag atggagtctc gctctgtcgc ccaggctgga gtgcagtggg gcaatcttgg	30600
ctcaccacaa tctctgcctc ctgggttcaa gtgatattcc tgcctcagcc tcccagatag	30660
ctaggattac aggcacgcac caccatgtcc ggctaatttt tgtattttta gtagagacgg	30720
ggtttcactg tgttgccag tcttgtctca aactcctgac ctctgtattc gccgcctca	30780
gcatcccaa gtgctgggat tacaggcgtg agctactgca cccggctccc tgaggtttta	30840
tagcttgtaa agccagagaa gtatttaaac caaggctcct ctgacattgg aagtcataac	30900
cactaaggga agcaccctta gtgagattta taaccagggt ctatttcggc acattgtccc	30960
acaggaggag ccatcccaag ccctggcttc gcggttcac cacttatttc tcacgtttta	31020
atcaagcacc tagtttgtgc caggctattc ggcttatgtg ttctaaccct tgagcatctg	31080
gtcattaacc attatcattg tcgttgaaag cactaagctg aggctgattc tgcccttcca	31140
gctctacagg gcataaagaa attccttctg gaactgcata gggtcctacc tccatgcctt	31200
taccaatgca agtatctcct ctccccaaca caccatttc tgccaaccg caagggcac	31260
tcaaaggctg ctttctctg ctcaaagct tcccaccgtg cctcttctgc cttccccacc	31320
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tcaccacat ttaaaaaggc tgtgatgagg ccgggtgtgg tggctcacac ctgtaatccc	31680
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gcaagaatct gtctcaaaaa ataaataaat aaataaataa acaaacaac aaacataaaa	31980
agactgtgat ggagatggca ggtggctgtg ggagctcaa acagagcccc tggctttgtc	32040
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## 6132-sequence listingPCT.txt

gacacaattg tttcaggcag aggggagagc acaagtcaaa ctgggagctt tcaggagggc	32160
aggagccctg gaggaaccta tctttccgcc cagccacaaa aatgaacagc ccatgcactg	32220
gcctttacac caacacggct tccatgatat ggagggaatt tttggtataa tgggcacatt	32280
tatggtttgt ttatacagag gggatgagag ctcgggattc agaattcgac ttgaatctga	32340
gtcccagctc agctatttac tggctgtctg actttggaca agccactcct cttttctgag	32400
attggtttcc tcatctgtga aatggaaaca attacatcct cccctggaac cactaactgc	32460
tcagctggca atttcctatc agccgttcac gagagagctt gcttatttta tagatgggga	32520
agccaaaagc cagagagggt gactgtcttg caaagcgcca cacagccagc acacagcagt	32580
gctgagacaa tgacaatgac ctagccatgg ccattctggg ggcattttct gcttgtgctt	32640
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accgacctct ttctgatgcg ggtgggagtc tgacgttggg ctttttcct ccagacccgt	32760
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## 6132-sequence listingPCT.txt

tttgggaaag gatacaatgg gtgctataga aaggtgaggc tggatctagc tgagatgtat	33720
gagaatgagc cctggcagcc gactgcccag gttcaactcc tggtttaacc accacgagac	33780
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ccaaacttgt gaagttctac ttacaaagca ccctcaagct ccctgggaag tggaaaaggc	33960
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ggcaagccgt gcaacagtcc caccaccccc gcacctcccc accaaggatg ggggtccattt	34140
cctatatctt ttgaaagcca gccccaaaa ggaaccctgg aatcagacct cacttttcct	34200
tgggttccag gcaagctgct tgaccattcc ttaaaacaaa acagtctgga catagcaaaa	34260
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tctcttgctt aaccctctac caggcagtta gcaacctcct atgcagtgga aatgcagctc	35160
atctgactca ttcattaaac agacttttat tgaccaccta ttatgagcta ggtccacaac	35220

## 6132-sequence listingPCT.txt

agcaagatga gaaccaaggg aaaaagtgcc tgtgattaga tggctagcaa cccaaaaggg	35280
acccttgggg tcctcacgtc catcccatct tcatgccagg cagagctctt ctttgaaaat	35340
ctgtggagtc agaggtgtaa ggcataggga caggtggggg tgagagttcc cccctcatt	35400
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tccagcggcc ttataaaagg tggccgtgag cacaggtgta gactgatctg cccggcacag	35520
cccagagata ccagctgctg tcaccatctc agggagatga ctctggcccc tcctcacct	35580
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cctaaaccga ggcgatcgct ggatccaggt aaggagccca ggtccaggct gggaaggaca	35760
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## 6132-sequence listingPCT.txt

ttctccttgg tgtccctgca ggatgaaatt gagtttggct acatcgaggc cccccataaa	36840
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gctctgataa ctgatgtttt tccaaaacat agagagtttt ctagtgggaa atgggaacta	37140
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tagagtcaaa ccaaccacca gcaccagttg ccacaggcat gagaagcgag gcctttccag	38340

## 6132-sequence listingPCT.txt

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gcagagcccc agcaccacag ccttggcaag ctcccatggt gccagctggg gcccacagat	38520
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gcacaggagg aattcaaaga gttggcagac acacgtgggg gctcctgtgg cttctgctgt	39120
tcactggcat gcatcccttc tgctcacatt tcattggcca aagcaagtca cgtgaccaag	39180
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acgggctggg cgagtggtc caccctgta atcccagcac tttgggaggc caaggtgggt	39420
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caccgcactc cagcctgggc gacagagcaa gactccatct cagaaaaaaaa aaaacaaca	39660
cagatgggga aactgaaagt gcatagcata aaatgcggac taattctgaa atcaccaata	39720
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tcacactcac actcactctc acactcactc tcacactcac tctcactcgc actctcacac	39840
tacaccgaga tgctcacaca ctcagcctcc ccatgcccag gccctgctc tttgttaatc	39900

## 6132-sequence listingPCT.txt

ataggaagac cgtggacaac ccacctggaa actgggtgcc cacagacca gactgaaggt	39960
gataaaagag ggtggctggc ttgggggctg aggaccctgg ctgcagaaga ctaacgcagg	40020
tgtgtgccct ctgcctaggg cccagatfff ggctacgtga cccgggagcc cctctttgag	40080
tctgtcacca gccttgactc atttggaac ctggaggtca gtccccaggt gaccgtgaac	40140
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tgggttgctc acacatggag caagtggctg ggggaattat tccctccac gacttctgt	40320
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ggatctaata tataactaaa taaacaactc ttttcccaa gtggaaaggt gtataatgag	40440
attataaatc agctgggttg tggggcacgg tggctctcac ctgtaatccc aacactttgg	40500
gaggccaagg tgggcagatc gcttgagtcc aggggtttga gaccagcttg ggcaacatgg	40560
caaaaccctt tctctacaaa aaatacaaaa attagccagg catggtggca tgcattctga	40620
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cagtgagctg agatcacacc actgcactcc agcctggcaa cagagtgaga cctcatctca	40740
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cactttggga ggccgaggca agcagattgc ttgagaccag aagttcgaga ccagcctgga	40860
caacatggca aaactttgtc ttactaaaa atacaagtat tagcaggcat ggtggtaatc	40920
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cgccattgca ctccagcctg ggcaacaaga gtgaaactgc gtctcaaaaa acaaaataaa	41340
ataaaataaa atattaaata aatcagctgg ggaagggatg gaggagtcca gagaaggaaa	41400
actgacaggt atgagtggga gcgtaccaat gaatcctcag ggctaccata cttaaaagag	41460

## 6132-sequence listingPCT.txt

gtatgagcag acgtggctcct gccccagaaa tgtgagtgccc tggctccctg gcctgtccat	41520
gattctcctc actccctgcc cagttgaccc accagccagt gaaaagacag attcttcctt	41580
gtcagggcag tcgctgggga aagagtgaat accttaggtt ctcacgtcac aaaagggctg	41640
ccaggagcct gcacagatgg ggtcagccag gatttgccg ccagtttcct ccgagccaca	41700
tgggatgctc agccttctgc ggggaggcca ctggcacagc cagcgactgt ttgcccactt	41760
ttgcctcctt ctccctccac tcagtggcca ctcatcact cagcaacatc ttcttgagca	41820
ccagccaagt gccaggccct gtgtcaggca cagggtccca aacaggaagc ccagcccctg	41880
ccttcaagga gatagcagag gtctcaggca tgcaaataga ccctgatgaa atggagggac	41940
ttgcaacgat agaaagaata acaggagtc aggtcagccc agggagtggc cctgaacccc	42000
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aggcactatt ctaggctctg gggatacagc ggtgaccaga acagatgaag tcccagctct	42120
ccgggagttt atagttgggt aagggcagta cagaaaataa acatggaatc aagtaaatca	42180
attagataat tctgaatgct gatacatgca atggagaaga taaaacaggg tgacatgata	42240
aaacattcct ggggacaggg gtgccttagc tgttgTTTTT ttgaagatgt gactagagtt	42300
gaggcttgga tgtaagaag taggcagcca tcaggagatt gtaaaggaag cgcattccat	42360
acagaaggaa cagcaaaggg aaaagcccca agggatagca agtgtagcag gtggctggag	42420
cagacagaac cgggggaagg gaggggaagc agggaggagg gctggccagg agccagatca	42480
gaaaggaatt tgttggccac cctaaggagc tagggttatc ttcggaggat aatggagaga	42540
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accaggagg gagatattgc agtgagctga gatcatgcca ctgcactggt gacagagtta	42840
gactctgtct caaaatacaa aaaacaaaca cacacaaaaa aagaaatgag gaagggttc	42900
ctggaggagg tttctcttga actgattaaa gattaaagta agtccaggca cagtggctca	42960
cacctgtaat cccagcagtt tgggaggcca aggagggcgg atcatgaggt caggagttca	43020

## 6132-sequence listingPCT.txt

agaccagctt ggccaacatg gtgaaaccct gtctctacta aaaatgcaaa aattagccgg	43080
gcgtggtggc acacgcctgt agtcccagct actcaggatg ctgaggcagg agaattgctt	43140
gaacccggga ggagagaggtt gcagtgaacc aagatcatgc cactctactc cagcctgggc	43200
aacatagcaa gactccatct cgggggaaaa aaaaaagatt aaagtaagta gaagttaatg	43260
tagcaaagag gcacatggat gagggcagat tttggagccc tcctgtgccc tagccccgtc	43320
cagcaggcca ggtgggactc ccgcacacaa aaggtagcct ctgcacactc actggcaccc	43380
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ccaaactcct cttgcaggcc ctctggtgcg gtgggtaatt tgctgaaact cctcttcctc	43620
ccttctccag gtctggtggt cggaggatga ccaagggtgt gcgtgacttc ctgaaggccc	43680
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tgaatggggt agcagcaaac caatatatta cccgcccctg ccagcagagg gcaagagcta	43860
gaggaactcg acagcataaa ggaaggagga agtaggctga agctggtttg catgttggtg	43920
ctgtggcagg taaaatttta accccataaa tccaaaatgt tagcattgca acacataatc	43980
agcctaataaa ttattaacga gagatttaaa ttcttttctc atactaaatc ttcaaaatct	44040
ggcaaagatt ttactcacat gacacaccta aattcagact agccacagct caagtgttca	44100
atagtcacat aaggctagtg gctattgtgt tgggtgtaat gctctagaga gaaataggtt	44160
atgcacctgt ggcactggaa agaggttctt tcattttctt atgggtacaa cttcataccc	44220
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gccttccac tgctgactct gtccctctgg actgtctctt gcagaaattc ctgctactca	44520
tggccagcac ctcggcctgc tacaagctct tccgagagaa gcagaaggac ggccatggag	44580

## 6132-sequence listingPCT.txt

aggccatcat gttcaaaggt gaggggccac agggccttga caggaagtgg cgagctggag	44640
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tccacttccc tgggtgtctg gcccgatcgg gggtttgtga ggtcgccatg ctgggaagca	44760
cctctggcct cctgtgacct ttgctgtggc tgggtggact gtgagctgcc cacagctcct	44820
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agaccacagt gagggttaaa tgggtgaaaa ctgacatgca gctgggtctg gtggctcatg	44940
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tcccaaagtg ctgggattac aggcattgagc caccacaccc agcctctcta taataaaaat	45360
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gagagataga aaatagatgc aatacaattt agggacagga agaaaagtgg acttttagtgg	45480
gcaaaaaggca tggtcagaca tcgtggttgt cagtccagaa gtgagacatt atcttctacg	45540
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gcatctcgg ctactgcaa gctccgcctc ccaggttcaa gccattctcc tgcctcagcc	46140

## 6132-sequence listingPCT.txt

tccccagtag ctgggattac aggcgccccg caccacgccc ggctaatttt ttgtatTTTT	46200
agtagaggTg gggtttcacc atgttagccg ggatggTctc aatctcctga cctcatgaac	46260
cacccgcctc ggcctcccaa agtgctggga ttacaggcgt gagccaccat gctcggccta	46320
TTTTTTTctt aaattacttt tgtcactttt caggttggta tccataatat atctcatgcc	46380
tgaaagcctg agttcccgca gctggttgat acttacatga ctgcccctca gatccaaaga	46440
cagtgttcct gactgtcact ggtgtctagg acagacaaga ccaatttaac accaccaccc	46500
TTTTTaaatt cccactgat gggaagtttg ttcttggatt ggcaagcttg agtcctgact	46560
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gaccattatt tttgtacaaa taggggcaag cagtgcCcca gatttctctt tgtatTTtag	46680
aaagagagat agagagaaaa tagatagaat acagtttggg gacaggaaga aaactggact	46740
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aagatgataa aaactacaga cttgccctcc agaaaaatgc ttatatcaat ctatctcctg	47040
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## 6132-sequence listingPCT.txt

agcaagagca	aggcagctgc	caccactgtc	ctggctcaga	tgtcatggtc	aactctggag	47760
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tcctgtgatc	cagcctctcc	ccagtcccat	ctccccagtc	ccagtccagc	agttagccca	47880
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ccctgtcctt	tgaacccac	aggcttgggt	gggatgagca	gcaagcgaat	caccatcaac	48000
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6132-sequence listingPCT.txt

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caagatggac gaggaccacc gtgccagagc cttcttccca aacatggtga ggccctgcag	49380
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aagctgtcca atggggaggc ccaggtccca atcctggctg agctgctgtg tgacctcacc	49500
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## 6132-sequence listingPCT.txt

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cagctcctgc ctttggaggc caaagcccca gatctctcca gcccagagc tgaaaacacc	52140
aagtcctat ttgagggtgt ctgtctggag acttagagtt tgtcatgtgt gtgtgtgtgt	52200
ttggttaatg tgggtttatg gggtttcttt cttttttttt tttttttttt tagtctacat	52260
tagggggaag tgagcgcctc ccatgtgcag acagtgtgtc tttatagatt tttctaaggc	52320
tttcccaat gatgtcggtg atttctgatg tttctgaagt tcccaggact cacacaccg	52380

## 6132-sequence listingPCT.txt

```

ttcccatctc acttgccac ccagtgtgac aaccctcggg gtggatatac ccccgtaggac 52440
tcatgggtct tccccacccc cactttctat aaatgtaggc ctagaatacg cttctctggt 52500
gcaaaactca gctaagttcc tgcttcacc ttgatgttga aatatcttat gtaagagggc 52560
aggggatgtc gtgaagatgg caagaagaac acagtttcaa atttctggaa aagagcctgt 52620
ggtaggagatc taaagatgtt tagggaagag ctcgactaaa gaacaatgaa ataaatggtc 52680
caagggaag tca 52693

```

&lt;210&gt; 2

&lt;211&gt; 665

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;223&gt; PAD2

&lt;400&gt; 2

```

Met Leu Arg Glu Arg Thr Val Arg Leu Gln Tyr Gly Ser Arg Val Glu
1      5      10      15
Ala Val Tyr Val Leu Gly Thr Tyr Leu Trp Thr Asp Val Tyr Ser Ala
20      25      30
Ala Pro Ala Gly Ala Gln Thr Phe Ser Leu Lys His Ser Glu His Val
35      40      45
Trp Val Glu Val Val Arg Asp Gly Glu Ala Glu Glu Val Ala Thr Asn
50      55      60
Gly Lys Gln Arg Trp Leu Leu Ser Pro Ser Thr Thr Leu Arg Val Thr
65      70      75      80
Met Ser Gln Ala Ser Thr Glu Ala Ser Ser Asp Lys Val Thr Val Asn
85      90      95
Tyr Tyr Asp Glu Glu Gly Ser Ile Pro Ile Asp Gln Ala Gly Leu Phe
100     105     110
Leu Thr Ala Ile Glu Ile Ser Leu Asp Val Asp Ala Asp Arg Asp Gly
115     120     125
Val Val Glu Lys Asn Asn Pro Lys Lys Ala Ser Trp Thr Trp Gly Pro
130     135     140
Glu Gly Gln Gly Ala Ile Leu Leu Val Asn Cys Asp Arg Glu Thr Pro
145     150     155     160
Trp Leu Pro Lys Glu Asp Cys Arg Asp Glu Lys Val Tyr Ser Lys Glu
165     170     175
Asp Leu Lys Asp Met Ser Gln Met Ile Leu Arg Thr Lys Gly Pro Asp
180     185     190
Arg Leu Pro Ala Gly Tyr Glu Ile Val Leu Tyr Ile Ser Met Ser Asp
195     200     205
Ser Asp Lys Val Gly Val Phe Tyr Val Glu Asn Pro Phe Phe Gly Gln
210     215     220
Arg Tyr Ile His Ile Leu Gly Arg Arg Lys Leu Tyr His Val Val Lys
225     230     235     240

```

## 6132-sequence listingPCT.txt

```

Tyr Thr Gly Gly Ser Ala Glu Leu Leu Phe Phe Val Glu Gly Leu Cys
      245                      250                      255
Phe Pro Asp Glu Gly Phe Ser Gly Leu Val Ser Ile His Val Ser Leu
      260                      265                      270
Leu Glu Tyr Met Ala Gln Asp Ile Pro Leu Thr Pro Ile Phe Thr Asp
      275                      280                      285
Thr Val Ile Phe Arg Ile Ala Pro Trp Ile Met Thr Pro Asn Ile Leu
      290                      295                      300
Pro Pro Val Ser Val Phe Val Cys Cys Met Lys Asp Asn Tyr Leu Phe
      305                      310                      315                      320
Leu Lys Glu Val Lys Asn Leu Val Glu Lys Thr Asn Cys Glu Leu Lys
      325                      330                      335
Val Cys Phe Gln Tyr Leu Asn Arg Gly Asp Arg Trp Ile Gln Asp Glu
      340                      345                      350
Ile Glu Phe Gly Tyr Ile Glu Ala Pro His Lys Gly Phe Pro Val Val
      355                      360                      365
Leu Asp Ser Pro Arg Asp Gly Asn Leu Lys Asp Phe Pro Val Lys Glu
      370                      375                      380
Leu Leu Gly Pro Asp Phe Gly Tyr Val Thr Arg Glu Pro Leu Phe Glu
      385                      390                      395                      400
Ser Val Thr Ser Leu Asp Ser Phe Gly Asn Leu Glu Val Ser Pro Pro
      405                      410                      415
Val Thr Val Asn Gly Lys Thr Tyr Pro Leu Gly Arg Ile Leu Ile Gly
      420                      425                      430
Ser Ser Phe Pro Leu Ser Gly Gly Arg Arg Met Thr Lys Val Val Arg
      435                      440                      445
Asp Phe Leu Lys Ala Gln Gln Val Gln Ala Pro Val Glu Leu Tyr Ser
      450                      455                      460
Asp Trp Leu Thr Val Gly His Val Asp Glu Phe Met Ser Phe Val Pro
      465                      470                      475                      480
Ile Pro Gly Thr Lys Lys Phe Leu Leu Leu Met Ala Ser Thr Ser Ala
      485                      490                      495
Cys Tyr Lys Leu Phe Arg Glu Lys Gln Lys Asp Gly His Gly Glu Ala
      500                      505                      510
Ile Met Phe Lys Gly Leu Gly Gly Met Ser Ser Lys Arg Ile Thr Ile
      515                      520                      525
Asn Lys Ile Leu Ser Asn Glu Ser Leu Val Gln Glu Asn Leu Tyr Phe
      530                      535                      540
Gln Arg Cys Leu Asp Trp Asn Arg Asp Ile Leu Lys Lys Glu Leu Gly
      545                      550                      555                      560
Leu Thr Glu Gln Asp Ile Ile Asp Leu Pro Ala Leu Phe Lys Met Asp
      565                      570                      575
Glu Asp His Arg Ala Arg Ala Phe Phe Pro Asn Met Val Asn Met Ile
      580                      585                      590
Val Leu Asp Lys Asp Leu Gly Ile Pro Lys Pro Phe Gly Pro Gln Val
      595                      600                      605
Glu Glu Glu Cys Cys Leu Glu Met His Val Arg Gly Leu Leu Glu Pro
      610                      615                      620
Leu Gly Leu Glu Cys Thr Phe Ile Asp Asp Ile Ser Ala Tyr His Lys
      625                      630                      635                      640
Phe Leu Gly Glu Val His Cys Gly Thr Asn Val Arg Arg Lys Pro Phe
      645                      650                      655

```

Thr Phe Lys Trp Trp His Met Val Pro  
 660 665

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 <213> Artificial Sequence

<220>  
 <223> PAD1 FW PRIMER

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 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> PAD1 RV PRIMER

<400> 4  
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<210> 5  
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<220>  
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<210> 8

<211> 20

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<220>

<223> PAD3 RV PRIMER

<400> 8

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20

<210> 9

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> PAD4 FW PRIMER

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20

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<211> 19

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<213> Artificial Sequence

<220>

<223> PAD4 RV PRIMER

<400> 10

gggcaccttg actcagctt

19

<210> 11

<211> 20

<212> DNA

<213> Artificial Sequence

&lt;220&gt;

&lt;223&gt; PAD6 FW PRIMER

&lt;400&gt; 11

caaggtatag gcgtgctggt

20

&lt;210&gt; 12

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; PAD6 RV PRIMER

&lt;400&gt; 12

tcctccatac ctccaaggaa

20

&lt;210&gt; 13

&lt;211&gt; 21

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; GAPDH FW PRIMER

&lt;400&gt; 13

agtgggtgtc gctgttgaag t

21

&lt;210&gt; 14

&lt;211&gt; 21

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; GAPDH RV PRIMER

&lt;400&gt; 14

aacgtgtcag tgggtggacct g

21