

STATEMENT ON A NONPROPRIETARY NAME ADOPTED BY THE USAN COUNCIL

USAN (JK-72)

LARUPARETIGENE ZOVAPARVOVEC

PRONUNCIATION

la roo" pa ret' i jeen zoe" sa par' voe vek

THERAPEUTIC USE

Treatment of retinitis pigmentosa (XLRP)

DESCRIPTION

DNA (recombinant adeno-associated virus serotype AAV2tYF vector rAAV2tYF-GRK1-RPGRco human retinitis pigmentosa GTPase regulator ORF15 codon-optimized cDNA plus 5'-human G protein-coupled receptor kinase 1 promoter and splice donor/splice acceptor and 3'-SV40 polyadenylation signal plus adeno-associated virus 2 inverted terminal repeat flanks)

SEQUENCE

```
SEQ      1 ttggccactc cctctctgcg cgctcgctcg ctactgagg ccgsscgrsc
      51 aaagsycgss cgwgcgsscgr scsttgsycg sscggcctca gtgagcgagc
     101 gagcgcgcag agagggagtg gccaaactcca tctactagggg ttcctcagat
     151 ctgaattcgg gccccagaag cctgggtggtt gtttgtcctt ctgaggggaa
     201 aagtgaggcg gcccttgga ggaaggggccc gggcagaatg atctaatecg
     251 attccaagca gctcagggga ttgtcttttt ctagcacctt cttgccactc
     301 ctaagcgtcc tccgtgacct cggctgggat ttagcctggt gctgtgtcag
     351 cccggggctc ccaggggctt cccagtggtc cccaggaacc ctcgacaggg
     401 ccagggcgtc tctctcgtcc agcaagggca gggacgggccc acaggccaag
     451 ggctctagac tcgaggaact gaaaaaccag aaagttaact ggtaagttaa
     501 gtctttttgt cttttatctc aggtcccgga tccgggtggtg gtgcaaatca
     551 aagaactgct cctcagtgga tgttgccttt acttctaggg ctgtacggaa
     601 gtgttacttc tgctctaaaa gctgcggaat tgtaccgccc gccgcgccac
     651 catgagagag ccagaggagc tgatgccaga tagcggagca gtgtttacct
     701 tcggaaagtc caagttcgca gagaataacc caggaaagtt ctggttttaa
     751 aacgacgtgc ccgtccacct gtcttgtggc gatgagcata gtgccgtggt
     801 cactgggaac aataagctgt atatgttcgg gtccaacaat tggggacagc
     851 tggggctggg atccaaatct gctatctcta agccaacctg cgtgaaggca
     901 ctgaaaccgg agaaggtcaa actggccgct tgtggcagaa accacctct
     951 ggtgagcacc gagggcgga atgtctatgc caccggaggc aacaatgagg
    1001 gacagctggg actgggggac actgaggaaa ggaatacctt tcacgtgatc
    1051 tccttcttta catctgagca taagatcaag cagctgagcg ccggctccaa
    1101 cacatctgca gccctgactg aggacgggccc cctgttcatg tggggagata
    1151 attcagaggg ccagattggg ctgaaaaacg tgagcaacgt gtgctgctc
    1201 cagcaggtga ccatcggaaa gccagtcagt tggatttcat gtggctacta
    1251 tcatagcgcc ttcgtgacca cagatggcga gctgtacgtc tttggggagc
    1301 ccgaaaacgg aaaactgggc ctgcctaacc agctgctggg caatcaccgg
    1351 acaccccagc tgggtgtccga gatccctgaa aaagtgatcc aggtcgctg
    1401 cgggggagag catacagtgg tcctgactga gaatgccgtg tacaccttcg
    1451 gactgggcca gtttggccag ctggggctgg gaaccttcct gtttgagaca
    1501 tccgaaccaa aagtgatcga gaacattcgc gaccagacta tcagctacat
    1551 ttctgcgga gagaatcaca ccgactgat cacagacatt ggctgatgt
    1601 atacctttgg cgatgggccc cacgggaagc tgggactggg cctgggagaa
    1651 ttactaatc acttcatccc caccctgtgc tctaacttcc tgcggttcat
    1701 cgtgaaactg gtcgcttgcg gcgggtgtca catggtggtc ttcgctgcac
    1751 ctcatagggg cgtggctaag gagatcgaat ttgacgagat taacgataca
    1801 tgcctgagcg tggcaacttt cctgccatac agctccctga cttctggcaa
    1851 tgtgctgcag agaaccctga gtgcaaggat gcgggagaagg gagagggaa
    1901 gctctcctga cagtttctca atgacgacgaa ccctgccacc tatcggggg
    1951 aactggggac tgagtgcctg cttcctgcct aactcagtgt ttccacgatg
    2001 tagcgagcgg aatctgcagg agtctgtcct gagtgagcag gatctgatgc
    2051 agccagagga acccgactac ctgctgggat agatgaccaa ggaggccgaa
```

```

2101 atcgacaact ctagtacagt ggagtccttg ggcgagacta ccgatatcct
2151 gaatatgaca cacattatgt cactgaacag caatgagaag agtctgaaac
2201 tgtcaccagt gcagaagcag aagaacagc agactattgg cgagctgact
2251 caggacaccg ccctgacaga gaacgacgat agcgatgagt atgaggaat
2301 gtccgagatg aaggaaggca aagcttgtaa gcagcatgtg agtcagggga
2351 tcttcatgac acagccagcc acaactattg aggctttttc agacgaggaa
2401 gtggagatcc ccgaggaaaa agagggcgca gaagattcca aggggaatgg
2451 aattgaggaa caggaggtgg aagccaacga ggaaaatgtg aaagtccacg
2501 gaggcaggaa ggagaaaaca gaaatcctgt ctgacgatct gactgacaag
2551 gccgaggtgt ccgaaggcaa ggcaaaatct gtcggagagg cagaagacgg
2601 accagagggg cgaggggatg gaacctgcga ggaaggctca agcggggctg
2651 agcattggca ggacgaggaa cgagagaagg gcgaaaagga taaagggcgc
2701 ggggagatgg aacgacctgg agagggcgaa aaagagctgg cagagaagga
2751 ggaatggaag aaaagggacg gcgaggaaca ggagcagaaa gaaagggagc
2801 agggccacca gaaggagcgc aaccaggaga tggagagggg cggcgaggaa
2851 gagcatggcg agggagaaga ggaagagggc gatagagaag aggaagagga
2901 aaaagaaggg gaaggggaagg aggaaggaga gggcgaggaa gtggaaggcg
2951 agagggaaaa ggaggaagga gaacggaaga aagaggaaag agccggcaaa
3001 gaggaaaagg gcgaggaaga gggcgatcag ggcgaaggcg aggaggaaga
3051 gaccgagggc cgcggggaag agaaagagga gggaggagag gtggagggcg
3101 gagaggtcga agagggaaag ggcgagcgcg aagaggaaga ggaagagggc
3151 gagggcgagg aagaagaggg cgagggggaa gaagaggagg gagagggcga
3201 agaggaagag ggggagggaa agggcgaaga ggaaggagag gaaggggagg
3251 gagaggaaga gggggagggg ggcgaggggg aaggcgagga ggaagaagga
3301 gagggggaag gcgaagagga aggcgagggg gaaggagagg aggaagaagg
3351 ggaagggcga ggcgaagagg agggagaagg agagggggag gaagaggaag
3401 gagaagggaa gggcgaggag gaaggcgaag agggagaggg ggaagggcag
3451 gaagaggaag gcgagggcga aggagaggac ggcgagggcg agggagaaga
3501 ggaggaaggg gaatgggaag gcgaagaaga ggaaggcga ggcgaaggcg
3551 aagaagaggg cgaaggggag ggcgagggag gcgaaggcga aggggagga
3601 gaggaagggc aaggagaagg cgaggaagaa gagggagagg aggaagggca
3651 ggaggaagga gaggggaggg aggaggggaga aggcgagggc gaagaagaag
3701 aagagggaga agtggagggc gaagtcgagg gggagggagg agaaggggaa
3751 ggggaggaag aagagggcga agaagaaggc gaggaaagag aaaaagaggg
3801 agaagggcag gaaaaccgga gaaataggga agaggaggaa gaggaagagg
3851 gaaagtacca ggagacaggg gaagaggaaa acgagcggca ggatggcgag
3901 gaatataaga aagtgagcaa gatcaaagga tccgtcaagt acggcaagca
3951 caaacctat cagaagaaaa gcgtgaccaa cacacagggg aatggaaaag
4001 agcagcgaag taaaatgcct gtgcagtcaa aacggctgct gaagaatggc
4051 ccaagcgggt ctaaaaaatt ctggaacaat gtcttgccac actatctgga
4101 actgaagtaa gcggccgcgc ggatccagac atgataagat acattgatga
4151 gtttgacaaa accacaacta gaatgcagtg aaaaaaatgc tttattttgtg
4201 aaatttgtga tgctattgct ttatttgtaa ccattataag ctgcaataaa
4251 caagttaaca acaacaattg cattcatttt atgtttcagg ttcaggggga
4301 ggtgtgggag gtttttttagc atgctgggga gagatctgag gaaccctag
4351 tgatggagtt ggccactccc tctctgcgcg ctcgctcgct cactgaggcc
4401 gsscgrscaa agsygcgssc wcgsscgrsc tttgsygcgss cggcctcagt
4451 gagcgagcga gcgcgcagag agggagtggc caa

```

SCHEMATIC MAP

Figure 1: Organization of AGTC-501 Vector



ITR = inverted terminal repeat, GRK1 = G protein-coupled receptor kinase 1 promoter, SD/SA = splice donor/splice acceptor, hRPGRco = codon-optimized human retinitis pigmentosa GTPase regulator open reading frame 15, pA = polyadenylation signal

In the AGTC-501 vector, the ITRs are the only wild-type AAV viral genome left in the vector. The rep/cap genes found in wild-type AAV are replaced by the GRK1, SD/SA, hRPGRco cDNA and pA elements.

TRADEMARK	None yet
SPONSOR	Applied Genetic Technologies Corporation (AGTC)
CODE DESIGNATION	AGTC-501
<u>CAS</u> REGISTRY NUMBER	2425817-08-7
UNII	8OPK0FI6EM
WHO NUMBER	12108

SCS