

Human opioid receptor, delta 1 (OPRD1), wild type, cloned into pcDNA3.1+
Sequence Range: 1 to 1179

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>HindIII      >KpnI      >BamHI
|             |             |
|             10          20          30          40          50
AAGCTTGGTACCGAGCTCGGATCCACCATGGAACCGGCCCCCTCCGCCGG
                               M E P A P S A G>
                               _____OPRD1_____>

                >PstI
                |
                60          70          80          90          100
CGCCGAGCTGCAGCCCCCGCTCTTCGCCAACGCCTCGGACGCCTACCCTA
 A E L Q P P L F A N A S D A Y P>
                _____OPRD1_____>

                110          120          130          140          150
GCGCCTGCCCCAGCGCTGGCGCCAATGCGTCGGGGCCGCCAGGCGCGCGG
 S A C P S A G A N A S G P P G A R>
                _____OPRD1_____>

                160          170          180          190          200
AGCGCCTCGTCCCTCGCCCTGGCAATCGCCATCACCGCGCTCTACTCGGC
 S A S S L A L A I A I T A L Y S A>
                _____OPRD1_____>

                210          220          230          240          250
CGTGTGCGCCGTGGGGCTGCTGGGCAACGTGCTTGTCATGTTTCGGCATCG
 V C A V G L L G N V L V M F G I>
                _____OPRD1_____>

                260          270          280          290          300
TCCGGTACACTAAGATGAAGACGGCCACCAACATCTACATCTTCAACCTG
 V R Y T K M K T A T N I Y I F N L>
                _____OPRD1_____>

                310          320          330          340          350
GCCTTAGCCGATGCGCTGGCCACCAGCACGCTGCCTTTCCAGAGTGCCAA
 A L A D A L A T S T L P F Q S A K>
                _____OPRD1_____>

                360          370          380          390          400
GTACCTGATGGAGACGTGGCCCTTCGGCGAGCTGCTCTGCAAGGCTGTGC
 Y L M E T W P F G E L L C K A V>
                _____OPRD1_____>

                410          420          430          440          450
TCTCCATCGACTACTACAATATGTTCAACGATCTTCACGCTCACCATG
 L S I D Y Y N M F T S I F T L T M>
                _____OPRD1_____>

                460          470          480          490          500
ATGAGTGTGACCGCTACATCGCTGTCTGCCACCCTGTCAAGGCCCTGGA
 M S V D R Y I A V C H P V K A L D>

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____OPRD1____>

510 520 530 540 550
CTTCCGCACGCCTGCCAAGGCCAAGCTGATCAACATCTGTATCTGGGTCC
F R T P A K A K L I N I C I W V>

____OPRD1____>

560 570 580 590 600
TGGCCTCAGGCGTTGGCGTGCCCATCATGGTCATGGCTGTGACCCGTCCC
L A S G V G V P I M V M A V T R P>

____OPRD1____>

610 620 630 640 650
CGGGACGGGGCAGTGGTGTGCATGCTCCAGTTCCCCAGCCCCAGCTGGTA
R D G A V V C M L Q F P S P S W Y>

____OPRD1____>

660 670 680 690 700
CTGGGACACGGTGACCAAGATCTGCGTGTTCTTCTTCGCCTTCGTGGTG
W D T V T K I C V F L F A F V V>

____OPRD1____>

710 720 730 740 750
CCATCCTCATCATCACCGTGTGCTATGGCCTCATGCTGCTGCGCCTGCGC
P I L I I T V C Y G L M L L R L R>

____OPRD1____>

760 770 780 790 800
AGTGTGCGCCTGCTGTGCGGGCTCCAAGGAGAAGGACCGCAGCCTGCGGCG
S V R L L S G S K E K D R S L R R>

____OPRD1____>

810 820 830 840 850
CATCACGCGCATGGTGTGTTGTTGTGGGCGCCTTCGTGGTGTGTTGGG
I T R M V L V V V G A F V V C W>

____OPRD1____>

860 870 880 890 900
CGCCCATCCACATCTTCGTATCGTCTGGACGCTGGTGGACATCGACCGG
A P I H I F V I V W T L V D I D R>

____OPRD1____>

>nt921_C->T_(Silent)

910 920 930 940 950
CGCGACCCGCTGGTGGTGGCTGCGCTGCACCTGTGCATCGCGCTGGGTTA
R D P L V V A A L H L C I A L G Y>

____OPRD1____>

960 970 980 990 1000
CGCCAATAGCAGCCTCAACCCCGTGCTCTACGCTTTCCTCGACGAGAACT
A N S S L N P V L Y A F L D E N>

____OPRD1____>

>NotI

1010 1020 1030 1040 1050

TCAAGCGCTGCTTCCGCCAGCTCTGCCGCAAGCCCTGCGGCCGCCCAGAC
F K R C F R Q L C R K P C G R P D>
____OPRD1____>

1060 1070 1080 1090 1100
CCCAGCAGCTTCAGCCGCGCCCGCGAAGCCACGGCCCGCGAGCGTGTAC
P S S F S R A R E A T A R E R V T>
____OPRD1____>

1110 1120 1130 1140 1150
CGCCTGCACCCCGTCCGATGGTCCCGCGGTGGCGCTGCCGCCTGAGAAT
A C T P S D G P G G G A A A *>
____OPRD1____>

>EcoRV
|
>PstI | >BstXI
| |
| 1160 1170
TCTGCAGATATCCAGCACAGTGGCGGCCC