

Human prostaglandin E receptor 2 (subtype EP2) (PTGER2) 3xHA-tagged (N-terminus)  
in pcDNA 3.1

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                                >KpnI
                                |
                        >AflIII  >Asp7181
                        |      |
                >NheI  >PmeI  >HindIII
                |      |      |
                10      20      30      40      50
GCTAGCGTTTTAACTTAAGCTTGGTACCACCATGTACCCATACGATGTTCC
CGATCGCAAATTTGAATTCGAACCATGGTGGTACATGGGTATGCTACAAG
                                M Y P Y D V>
                                _____3XHA_____>

                60      70      80      90      100
CAGATTACGCTTACCCATACGATGTTCCAGATTACGCTTACCCATACGAT
GTCTAATGCGAATGGGTATGCTACAAGGTCTAATGCGAATGGGTATGCTA
P D Y A Y P Y D V P D Y A Y P Y D>
                _____3XHA_____>

                110      120      130      140      150
GTTCCAGATTACGCTGATGGCAATGCCTCCAATGACTCCCAGTCTGAGGA
CAAGGTCTAATGCGACTACCGTTACGGAGGTTACTGAGGGTCAGACTCCT
V P D Y A D>
                _____3XHA_____>
                                G N A S N D S Q S E D>
                                _____HUMAN PROSTAGLANDIN E REC_____>

                160      170      180      190      200
CTGCGAGACGCGACAGTGGCTTCCCCCAGGCGAAAGCCCAGCCATCAGCT
GACGCTCTGCGCTGTCACCGAAGGGGGTCCGCTTTCGGGTGCGGTAGTCGA
C E T R Q W L P P G E S P A I S>
                _____HUMAN PROSTAGLANDIN E RECEPTOR 2 (SUBTYPE E_____>

                210      220      230      240      250
CCGTCATGTTCTCGGCCGGGGTGCTGGGGGAACCTCATAGCACTGGCGCTG
GGCAGTACAAGAGCCGGCCCCACGACCCCTTGGAGTATCGTGACCGCGAC
S V M F S A G V L G N L I A L A L>
                _____HUMAN PROSTAGLANDIN E RECEPTOR 2 (SUBTYPE E_____>

                260      270      280      290      300
CTGGCGCGCCGCTGGCGGGGGGACGTGGGGTGCAGCGCCGGCCGCAGGAG
GACCGCGCGGCGACCGCCCCCTGCACCCACGTGCGGGCCGGCGTCCTC
L A R R W R G D V G C S A G R R S>
                _____HUMAN PROSTAGLANDIN E RECEPTOR 2 (SUBTYPE E_____>

                310      320      330      340      350
CTCCCTCTCCTTGTTCCACGTGCTGGTGACCGAGCTGGTGTTACCGACC
GAGGGAGAGGAACAAGGTGCACGACCACTGGCTCGACCACAAGTGGCTGG
S L S L F H V L V T E L V F T D>
                _____HUMAN PROSTAGLANDIN E RECEPTOR 2 (SUBTYPE E_____>

                360      370      380      390      400
TGCTCGGGACCTGCCTCATCAGCCCAGTGGTACTGGCTTCGTACGCGCGG
ACGAGCCCTGGACGGAGTAGTCGGGTCACCATGACCGAAGCATGCGCGCC
L L G T C L I S P V V L A S Y A R>

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\_\_\_HUMAN PROSTAGLANDIN E RECEPTOR 2 (SUBTYPE E\_\_\_>

410 420 430 440 450  
AACCAGACCCTGGTGGCACTGGCGCCCGAGAGCCGCGGTGCACCTACTT  
TTGGTCTGGGACCACCGTGACCGCGGGCTCTCGGCGCGCACGTGGATGAA  
N Q T L V A L A P E S R A C T Y F>

\_\_\_HUMAN PROSTAGLANDIN E RECEPTOR 2 (SUBTYPE E\_\_\_>

460 470 480 490 500  
CGCTTTTCGCCATGACCTTCTTCAGCCTGGCCACGATGCTCATGCTCTTTCG  
GCGAAAGCGGTACTGGAAGAAGTCGGACCGGTGCTACGAGTACGAGAAGC  
A F A M T F F S L A T M L M L F>

\_\_\_HUMAN PROSTAGLANDIN E RECEPTOR 2 (SUBTYPE E\_\_\_>

510 520 530 540 550  
CCATGGCCCTGGAGCGCTACCTCTCGATCGGGCACCCCTACTTCTACCAG  
GGTACCGGGACCTCGCGATGGAGAGCTAGCCCGTGGGGATGAAGATGGTC  
A M A L E R Y L S I G H P Y F Y Q>

\_\_\_HUMAN PROSTAGLANDIN E RECEPTOR 2 (SUBTYPE E\_\_\_>

560 570 580 590 600  
CGCCGCGTCTCGCGCTCCGGGGGCTGGCCGTGCTGCCTGTCATCTATGC  
GCGGCGCAGAGCGCGAGGCCCCCGGACCGGCACGACGGACAGTAGATACG  
R R V S R S G G L A V L P V I Y A>

\_\_\_HUMAN PROSTAGLANDIN E RECEPTOR 2 (SUBTYPE E\_\_\_>

610 620 630 640 650  
AGTCTCCCTGCTCTTCTGCTCGCTGCCGCTGCTGGACTATGGGCAGTACG  
TCAGAGGGACGAGAAGACGAGCGACGGCGACGACCTGATACCCGTCATGC  
V S L L F C S L P L L D Y G Q Y>

\_\_\_HUMAN PROSTAGLANDIN E RECEPTOR 2 (SUBTYPE E\_\_\_>

660 670 680 690 700  
TCCAGTACTGCCCCGGGACCTGGTGCTTCATCCGGCACGGGCGGACCGCT  
AGGTCATGACGGGGCCCTGGACCACGAAGTAGGCCGTGCCCGCCTGGCGA  
V Q Y C P G T W C F I R H G R T A>

\_\_\_HUMAN PROSTAGLANDIN E RECEPTOR 2 (SUBTYPE E\_\_\_>

710 720 730 740 750  
TACCTGCAGCTGTACGCCACCCTGCTGCTGCTTCTCATTGTCTCGGTGCT  
ATGGACGTCGACATGCGGTGGGACGACGACGAAGAGTAACAGAGCCACGA  
Y L Q L Y A T L L L L L I V S V L>

\_\_\_HUMAN PROSTAGLANDIN E RECEPTOR 2 (SUBTYPE E\_\_\_>

760 770 780 790 800  
CGCCTGCAACTTCAGTGTCAATTCTCAACCTCATCCGCATGCACCGCCGAA  
GCGGACGTTGAAGTCACAGTAAGAGTTGGAGTAGGCGTACGTGGCGGCTT  
A C N F S V I L N L I R M H R R>

\_\_\_HUMAN PROSTAGLANDIN E RECEPTOR 2 (SUBTYPE E\_\_\_>

810 820 830 840 850  
GCCGAGAAGCCGCTGCGGACCTTCCCTGGGCAGTGGCCGGGGCGGCCCC  
CGGCCTCTTCGGCGACGCTGGAAGGGACCCGTCACCGGCCCCGCGGGG  
S R R S R C G P S L G S G R G G P>

\_\_\_HUMAN PROSTAGLANDIN E RECEPTOR 2 (SUBTYPE E\_\_\_>

860 870 880 890 900

GGGGCCCGCAGGAGAGGGGAAAGGGTGTCCATGGCGGAGGAGACGGACCA  
CCCCGGGCGTCCTCTCCCCTTTCCACAGGTACCGCCTCCTCTGCCTGGT  
G A R R R G E R V S M A E E T D H>  
\_\_\_\_HUMAN PROSTAGLANDIN E RECEPTOR 2 (SUBTYPE E\_\_\_\_>

910 920 930 940 950  
CCTCATTCTCCTGGCTATCATGACCATCACCTTCGCCGTCTGCTCCTTGC  
GGAGTAAGAGGACCGATAGTACTGGTAGTGGAAGCGGCAGACGAGGAACG  
L I L L A I M T I T F A V C S L>  
\_\_\_\_HUMAN PROSTAGLANDIN E RECEPTOR 2 (SUBTYPE E\_\_\_\_>

960 970 980 990 1000  
CTTTCACGATTTTTGCATATATGAATGAAACCTCTTCCCGAAAGGAAAAA  
GAAAGTGCTAAAAACGTATATACTTACTTTGGAGAAGGGCTTTCCTTTTT  
P F T I F A Y M N E T S S R K E K>  
\_\_\_\_HUMAN PROSTAGLANDIN E RECEPTOR 2 (SUBTYPE E\_\_\_\_>

1010 1020 1030 1040 1050  
TGGGACCTCCAAGCTCTTAGGTTTTTATCAATTAATTCAATAATTGACCC  
ACCCTGGAGGTTTCGAGAATCCAAAATAGTTAATTAAGTTATTAAGTGGG  
W D L Q A L R F L S I N S I I D P>  
\_\_\_\_HUMAN PROSTAGLANDIN E RECEPTOR 2 (SUBTYPE E\_\_\_\_>

1060 1070 1080 1090 1100  
TTGGGTCTTTGCCATCCTTAGGCCTCCTGTTCTGAGACTAATGCGTTCAG  
AACCCAGAAACGGTAGGAATCCGGAGGACAAGACTCTGATTACGCAAGTC  
W V F A I L R P P V L R L M R S>  
\_\_\_\_HUMAN PROSTAGLANDIN E RECEPTOR 2 (SUBTYPE E\_\_\_\_>

1110 1120 1130 1140 1150  
TCCTCTGTTGTGCGATTTTCATTAAGAACACAAGATGCAACACAACTTCC  
AGGAGACAACAGCCTAAAGTAATTCTTGTGTTCTACGTTGTGTTTGAAGG  
V L C C R I S L R T Q D A T Q T S>  
\_\_\_\_HUMAN PROSTAGLANDIN E RECEPTOR 2 (SUBTYPE E\_\_\_\_>

1160 1170 1180 1190 1200  
TGTTCTACACAGTCAGATGCCAGTAAACAGGCTGACCTTTGACTCGAGTC  
ACAAGATGTGTGTCAGTCTACGGTCATTTGTCCGACTGGAAACTGAGCTCAG  
C S T Q S D A S K Q A D L \*>  
\_\_\_\_HUMAN PROSTAGLANDIN E RECEPTOR 2 (S\_\_\_\_>

>PmeI  
|  
>ApaI  
|  
1210  
|  
TAGAGGGCCCGTTTAAAC  
ATCTCCCGGGCAAATTTG