

Product datasheet for RC226902

Prostaglandin dehydrogenase 1 (HPGD) (NM_001145816) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Prostaglandin dehydrogenase 1 (HPGD) (NM_001145816) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: Prostaglandin dehydrogenase 1
Synonyms: 15-PGDH; PGDH; PGDH1; PHOAR1; SDR36C1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC226902 representing NM_001145816
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCACGTGAACGGCAAAGTGCCGCTGGTGACCGCGCGGCTCAGGGCATAGGCAGAGCCTTTGCAGAGG
CGCTGCTGCTTAAGGGCGCCAAGGTAGCGCTGGTGGATTGGAATCTTGAAGCAGGTGTACAGTGTAAAGC
TGCCCTGGATGAGCAGTTTGAACCTCAGAAGACTCTGTTCCAGTCCGATGTGGCTGACCAGCAACAA
CTGAGAGACACTTTAGAAAAGTTGTAGACCACCTTGAAGACTGGACATTTGGTCAATAATGCTGGAG
TGATAATGAGAAAACTGGGAAAACTCTGCAATTAATTTGGTTTCTGTTATCAGTGGAACTATCT
TGGTTTGGATTACATGAGTAAGCAAAATGGAGGTGAAGCGGCATCATTATCAATATGTCATCTTTAGCA
GGACTCATGCCCGTTGCACAGCAGCCGGTTTATTGTGCTCAAAGCATGGCATAGTTGGATTACACGCT
CAGCAGCGCCACCATTGATTGCCAATGGATTGATAACACTCAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC226902 representing NM_001145816
Red=Cloning site Green=Tags(s)
MHVNGKVALVTGAAQIGRAFAEALLLKGAVALVDWNLEAGVQCKAALDEQFEPQKTLFIQCDVADQQQ
LRDTRKVVDFHGRDLILVNNAGVNNEKNWEKTLQINLVSVISGTYLGLDYMSKQNGEGGIIINMSSLA
GLMPVAQQPVYCAASKHGIVGFRSAAPTIDCQWIDNTH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1474_f10.zip



[View online »](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001145816

ORF Size: 534 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_001145816.3](#)

RefSeq ORF: 537 bp

Locus ID: 3248

UniProt ID: [P15428](#)

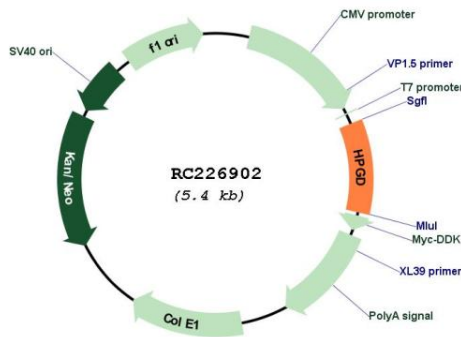
Cytogenetics: 4q34.1

Protein Families: Druggable Genome

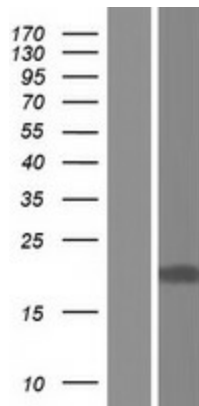
MW: 19.1 kDa

Gene Summary: This gene encodes a member of the short-chain nonmetalloenzyme alcohol dehydrogenase protein family. The encoded enzyme is responsible for the metabolism of prostaglandins, which function in a variety of physiologic and cellular processes such as inflammation. Mutations in this gene result in primary autosomal recessive hypertrophic osteoarthropathy and craniosteoarthropathy. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2009]

Product images:



Circular map for RC226902



Western blot validation of overexpression lysate (Cat# [LY429019]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC226902 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).