

Product datasheet for **RC233415**

Prostaglandin dehydrogenase 1 (HPGD) (NM_001256306) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Prostaglandin dehydrogenase 1 (HPGD) (NM_001256306) 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: >RC233415 representing NM_001256306
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCACGTGAACGGCAAAGTGCCGCTGGTGACCGCGCGGCTCAGGGCATAGGCAGAGCCTTTGCAGAGG
CGCTGCTGCTTAAGGGCGCCAAGGTAGCGCTGGTGGATTGGAATCTTGAAGCAGGTGTACAGTGTAAAGC
TGCCCTGGATGAGCAGTTTGAACCTCAGAAGACTCTGTTCCAGTCCGATGTGGCTGACCAGCAACAA
CTGAGAGGACTCATGCCGTTGCACAGCAGCCGTTTATTGTGCTCAAAGCATGGCATAGTTGGATTCA
CACGCTCAGCAGGTTGGCTGCTAATCTTATGAACAGTGGTGTGAGACTGAATGCCATTTGTCCAGGCTT
TGTTAACACAGCCATCCTTGAATCAATTGAAAAAGAAGAAAACATGGGACAATATATAGAATATAAGGAT
CATATCAAGGATATGATTAATACTATGGAATTTTGGACCCACCATTTGATTGCCAATGGATTGATAACAC
TCATTGAAGATGATGCTTTAAATGGTGCTATTATGAAGATCACAACCTTCTAAGGGAATTCATTTTCAAGA
CTATGATACAACCTCATTTCAGCAAAAACCCAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC233415 representing NM_001256306
Red=Cloning site Green=Tags(s)

MHVNGKVALVTGAAQIGRAFAEALLLKGAVALVDWNLEAGVQCKAALDEQFEPQKTLFIQCDVADQQQ
LRGLMPVAQQPVYCASKHGIVGFTRSAALANLMNSGVRLNAICPGFVNTAILESIEKEENMGQYIEYKD
HIKDMIKYYGILDPLIANGILITLIEDDALNGAIMKITTSSKGIHFQDYDTPFQAKTQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001256306

ORF Size: 594 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_001256306.1](#), [NP_001243235.1](#)

RefSeq Size: 2840 bp

RefSeq ORF: 597 bp

Locus ID: 3248

UniProt ID: [P15428](#)

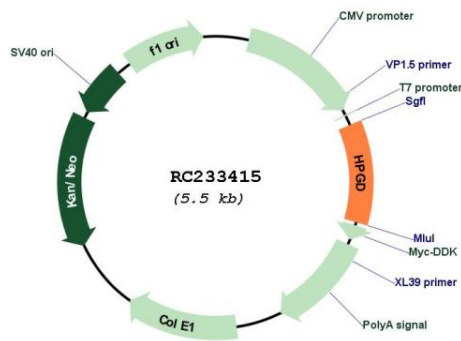
Cytogenetics: 4q34.1

Protein Families: Druggable Genome

MW: 22 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 cranioosteoarthropathy. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2009]

Product images:



Circular map for RC233415