

Product datasheet for RC233303

OriGene Technologies, Inc.

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Prostaglandin dehydrogenase 1 (HPGD) (NM_001256301) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Prostaglandin dehydrogenase 1 (HPGD) (NM_001256301) 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 >RC233303 representing NM_001256301 Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

 ${\tt TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC}$

GCCGCGATCGCC

ATGAGTAAGCAAAATGGAGGTGAAGGCGGCATCATTATCAATATGTCATCTTTAGCAGGACTCATGCCCG
TTGCACAGCAGCCGGTTTATTGTGCTTCAAAGCATGGCATAGTTGGATTCACACGCTCAGCAGCGTTGGC
TGCTAATCTTATGAACAGTGGTGTGAGACTGAATGCCATTTGTCCAGGCTTTGTTAACACAGCCATCCTT
GAATCAATTGAAAAAGAAAAACATGGGACAATATATAGAATATAAGGATCATATCAAGGATATGATTA
AATACTATGGAATTTTGGACCCACCATTGATTGCCAATGGATTGATAACACTCATTGAAGATGATGCTTT
AAATGGTGCTATTATGAAGATCACAACTTCTAAGGGAATTCATTTTCAAGACTATGATACAACTCCATTT
CAAGCAAAAACCCAA

 ${\color{red} \textbf{ACGCGT}} \textbf{ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT}$

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC233303 representing NM_001256301

Red=Cloning site Green=Tags(s)

MSKQNGGEGGIIINMSSLAGLMPVAQQPVYCASKHGIVGFTRSAALAANLMNSGVRLNAICPGFVNTAIL ESIEKEENMGQYIEYKDHIKDMIKYYGILDPPLIANGLITLIEDDALNGAIMKITTSKGIHFQDYDTTPF

QAKTQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

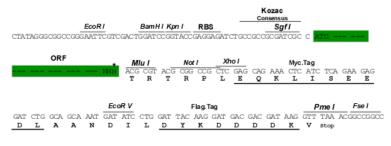
Restriction Sites: Sgfl-Mlul





Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_001256301

ORF Size: 435 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: <u>NM 001256301.1, NP 001243230.1</u>

RefSeq Size: 2774 bp
RefSeq ORF: 438 bp
Locus ID: 3248
UniProt ID: P15428



Cytogenetics: 4q34.1

Protein Families: Druggable Genome

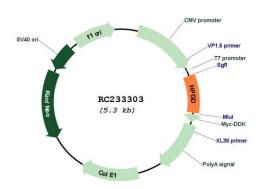
MW: 16.1 kDa

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 cranioosteoarthropathy. Multiple transcript variants encoding different isoforms have

been found for this gene. [provided by RefSeq, Mar 2009]

Product images:



Circular map for RC233303