

## **Product datasheet for SC332341**

## OriGene Technologies, Inc.

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## Prostaglandin dehydrogenase 1 (HPGD) (NM 001256307) Human Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: Prostaglandin dehydrogenase 1 (HPGD) (NM 001256307) Human Untagged Clone

Tag: Tag Free

Symbol: Prostaglandin dehydrogenase 1

Synonyms: 15-PGDH; PGDH; PGDH1; PHOAR1; SDR36C1

**Vector:** pCMV6-Entry (PS100001)

Fully Sequenced ORF: >SC332341 representing NM\_001256307.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

ATGAGTAAGCAAAATGGAGGTGAAGGCGGCATCATTATCAATATGTCATCTTTAGCAGGACTCATGCCC GTTGCACAGCAGCCGGTTATTGTGCTTCAAAGCATGGCATAGTTGGATTCACACGCTCAGCAGCGTTG GCTGCTAATCTTATGAACAGTGGTGTGAGACTGAATGCCATTTGTCCAGGCTTTGTTAACACAGCCATC CTTGAATCAATTGAAAAAGAAGAAAACATGGGACCATTATATAGAATATAAGGATCATATCAAGGATATG ATTAAATACTATGGAATTTTGGACCCACCATTGATTGCCAATGGATTGATAACACTCATTGAAGATATACAACT GCTTTAAATGGTGCTATTATGAAGATCACAACTTCTAAGGGAATTCATTTTCAAGACTATGATACAACT

CCATTTCAAGCAAAAACCCAATGA

**Restriction Sites:** Sgfl-Mlul

**ACCN:** NM\_001256307

**Insert Size:** 438 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

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 001256307.1

 RefSeq Size:
 2937 bp

 RefSeq ORF:
 438 bp

 Locus ID:
 3248

 UniProt ID:
 P15428

 Cytogenetics:
 4q34.1

**Protein Families:** Druggable Genome

**MW:** 15.7 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]

Transcript Variant: This variant (6) lacks a 5' exon compared to variant 1. This variant represents translation initiation at a downstream AUG compared to variant 1; the 5'-most initiation codon, as used in variant 1, is associated with a weak Kozak sequence and a truncated ORF that would render the transcript a candidate for nonsense-mediated decay (NMD). Leaky scanning may allow translation initiation at the downstream AUG, to encode an isoform (3) with a shorter N-terminus, compared to isoform 1. Variants 3 and 6 encode the

same protein (isoform 3).