

## Product datasheet for RC215144L3V

## OriGene Technologies, Inc.

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## PRODH2 (NM\_021232) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

Product Type: Lentiviral Particles

Product Name: PRODH2 (NM 021232) Human Tagged ORF Clone Lentiviral Particle

Symbol: PRODH2

Synonyms: HSPOX1; HYPDH

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-Myc-DDK-P2A-Puro (PS100092)

 Tag:
 Myc-DDK

 ACCN:
 NM\_021232

 ORF Size:
 1608 bp

**ORF Nucleotide** 

1000 ph

Sequence:

Cytogenetics:

The ORF insert of this clone is exactly the same as(RC215144).

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

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.

**RefSeg:** NM 021232.1, NP 067055.1

19q13.12

 RefSeq Size:
 1677 bp

 RefSeq ORF:
 1383 bp

 Locus ID:
 58510

 UniProt ID:
 Q9UF12

**Protein Pathways:** Arginine and proline metabolism, Metabolic pathways

**MW:** 58.7 kDa







## **Gene Summary:**

The protein encoded by this gene catalyzes the first step in the catabolism of trans-4-hydroxy-L-proline, an amino acid derivative obtained through food intake and collagen turnover. One of the downstream products of this catabolism is glyoxylate, which in people with disorders of glyoxalate metabolism can lead to an increase in oxalate levels and the formation of calcium-oxalate kidney stones. Therefore, this gene may serve as a therapeutic target against primary hyperoxalurias (PH). This gene is similar to proline dehydrogenase (oxidase) 1, a mitochondrial enzyme that catalyzes the first step in proline catabolism. [provided by RefSeq, Jan 2017]