

## OriGene Technologies, Inc.

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## Product datasheet for RC228134L4V

## Aspartate beta hydroxylase (ASPH) (NM\_001164756) Human Tagged ORF Clone Lentiviral Particle

## **Product data:**

Product Type:	Lentiviral Particles
Product Name:	Aspartate beta hydroxylase (ASPH) (NM_001164756) Human Tagged ORF Clone Lentiviral Particle
Symbol:	ASPH
Synonyms:	AAH; BAH; CASQ2BP1; FDLAB; HAAH; JCTN; junctin
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_001164756
ORF Size:	609 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC228134).
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. <u>More info</u>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	<u>NM 001164756.1, NP 001158228.1</u>
RefSeq ORF:	612 bp
Locus ID:	444
UniProt ID:	<u>Q12797</u>
Cytogenetics:	8q12.3
Protein Families:	Druggable Genome, Transmembrane
MW:	21.8 kDa



This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2022 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US



Gene Summary:

This gene is thought to play an important role in calcium homeostasis. The gene is expressed from two promoters and undergoes extensive alternative splicing. The encoded set of proteins share varying amounts of overlap near their N-termini but have substantial variations in their C-terminal domains resulting in distinct functional properties. The longest isoforms (a and f) include a C-terminal Aspartyl/Asparaginyl beta-hydroxylase domain that hydroxylates aspartic acid or asparagine residues in the epidermal growth factor (EGF)-like domains of some proteins, including protein C, coagulation factors VII, IX, and X, and the complement factors C1R and C1S. Other isoforms differ primarily in the C-terminal sequence and lack the hydroxylase domain, and some have been localized to the endoplasmic and sarcoplasmic reticulum. Some of these isoforms are found in complexes with calsequestrin, triadin, and the ryanodine receptor, and have been shown to regulate calcium release from the sarcoplasmic reticulum. Some isoforms have been implicated in metastasis. [provided by RefSeq, Sep 2009]