

Product datasheet for SC326769

OriGene Technologies, Inc.

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Aspartate beta hydroxylase (ASPH) (NM_001164756) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Aspartate beta hydroxylase (ASPH) (NM 001164756) Human Untagged Clone

Tag: Tag Free
Symbol: ASPH

Synonyms: AAH; BAH; CASQ2BP1; FDLAB; HAAH; JCTN; junctin

Mammalian Cell None

Selection:

Vector: pCMV6-XL5

E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >NCBI ORF sequence for NM_001164756, the custom clone sequence may differ by one or

more nucleotides

CATAACCAG

Restriction Sites: Please inquire **ACCN:** NM_001164756

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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.





The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube Components:

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.

NM 001164756.1, NP 001158228.1 RefSeq:

RefSeq Size: 1712 bp RefSeq ORF: 612 bp Locus ID: 444

UniProt ID: Q12797 Cytogenetics: 8q12.3

Protein Families: Druggable Genome, Transmembrane

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

RefSeq, Sep 20091

Transcript Variant: This variant (12) includes an alternate in-frame exon and uses a distinct 3' splice pattern that lacks many coding exons, compared to variant 1. The resulting isoform (I) includes an alternate segment and has a substantially shorter and distinct C-terminus,

the sarcoplasmic reticulum. Some isoforms have been implicated in metastasis. [provided by

compared to isoform a.