

Product datasheet for RC224881

OriGene Technologies, Inc.

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Aspartate beta hydroxylase (ASPH) (NM_032467) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Aspartate beta hydroxylase (ASPH) (NM_032467) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: Aspartate beta hydroxylase

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

Mammalian Cell Neomycin

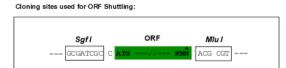
Selection:

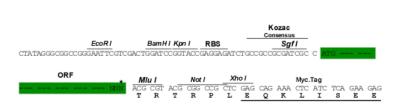
Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





				EcoR V					Flag.Tag							F	me l	Fse I
GAT	CTG	GCA	GCA	AAT	GAT	ATC	CTG	GAT	TAC	AAG	GAT	GAC	GAC	GAT	AAG	GTT	TAA	ACGGCCGGCC
D	L	A	A	N	D	I	L	D	Y	ĸ	D	D	D	D	K	v	Stop	

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

ACCN: NM_032467

ORF Size: 630 bp





OTI Disclaimer:

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at customercom or by calling 301.340.3188 option 3 for pricing and delivery.

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.

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

RefSeq: <u>NM 032467.4</u>

RefSeq Size:3242 bpRefSeq ORF:633 bpLocus ID:444

UniProt ID: Q12797
Cytogenetics: 8q12.3

Domains: Asp-B-Hydro_N

Protein Families: Druggable Genome, Transmembrane

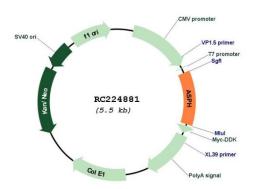
MW: 23.8 kDa



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]

Product images:



Circular map for RC224881