

Product datasheet for **TR306534**

Aspartate beta hydroxylase (ASPH) Human shRNA Plasmid Kit (Locus ID 444)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Aspartate beta hydroxylase (ASPH) Human shRNA Plasmid Kit (Locus ID 444)
Locus ID:	444
Synonyms:	AAH; BAH; CASQ2BP1; FDLAB; HAAH; JCTN; junctin
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	ASPH - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 444). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_001164750 , NM_001164751 , NM_001164752 , NM_001164753 , NM_001164754 , NM_001164755 , NM_001164756 , NM_004318 , NM_020164 , NM_032466 , NM_032467 , NM_032468 , NM_032466.1 , NM_032466.2 , NM_032466.3 , NM_004318.1 , NM_004318.2 , NM_004318.3 , NM_032468.1 , NM_032468.2 , NM_032468.3 , NM_032468.4 , NM_020164.3 , NM_020164.4 , NM_032467.1 , NM_032467.2 , NM_032467.3 , NM_001164756.1 , NM_001164753.1 , NM_001164755.1 , NM_001164752.1 , NM_001164754.1 , NM_001164751.1 , NM_001164750.1 , BC015518 , BC025236 , BC066929 , BC142967 , BC144362 , BC144363 , BC166658 , BM785890 , NM_032466.4 , NM_032467.4 , NM_020164.5 , NM_001164755.2 , NM_001164753.2 , NM_001164751.2 , NM_032468.5 , NM_001164750.2 , NM_001164752.2 , NM_004318.4
UniProt ID:	Q12797



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Summary:	<p>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]</p>
shRNA Design:	<p>These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.</p>
Performance Guaranteed:	<p>OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.</p> <p>For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).</p>