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# Rabbit Anti-Aspartate beta hydroxylase antibody

SL12137R

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|---|---|
| **Product Name** | Aspartate beta hydroxylase |
| **Chinese Name** | 天门冬氨酸β羟化酶抗体 |
| **Alias** | ASP beta hydroxylase; Aspartyl/asparaginyl beta hydroxylase; ASPH; BAH; CASQ2BP1; HAAH; JCTN; junctin; Peptide aspartate beta dioxygenase; ASPH_HUMAN. |
| **Research Area** | Cell biology Neurobiology Signal transduction The cell membrane 受体 |
| **Immunogen Species** | Rabbit |
| **Clonality** | Polyclonal |
| **React Species** | (predicted: Human, Mouse, Rat, Chicken, Cow, Horse, Rabbit, ) |
| **Applications** | IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000<br>（Paraffin sections need antigen repair）<br>not yet tested in other applications.<br>optimal dilutions/concentrations should be determined by the end user. |
| **Theoretical molecular weight** | 86kDa |
| **Cellular localization** | cytoplasmic The cell membrane |
| **Form** | Liquid |
| **Concentration** | 1mg/ml |
| **immunogen** | KLH conjugated synthetic peptide derived from human ASPH/Aspartate beta hydroxylase: 301-400/758 |
| **Lsotype** | IgG |
| **Purification** | affinity purified by Protein A |
| **Buffer Solution** | 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol. |
| **Storage** | Shipped at 4℃. Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. |
| **Attention** | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |

**PubMed** PubMed

Aspartyl/asparaginyl beta-hydroxylase (ASPH) is a widely-expressed type II membrane protein involved in calcium homeostasis. Located in the endoplasmic reticulum, ASPH specifically hydroxylates an Asp or Asn residue in the epidermal growth factor-like (EGF) domains of several proteins, using iron as a cofactor. The ASPH gene encodes 3 proteins, ASPH, Junctin, and Junctate (or Humbug), that differ significantly in their C-terminal domains. These ASPH gene products are expressed as five transcript variants that differ by their roles in calcium storage and release, hydroxylation capabilities, and tissue specificity. While all ASPH variants are expressed in skeletal muscle, only some are detected in heart, brain, pancreas, placenta, lung, liver, and kidney tissues. In the lumen of the endoplasmic reticulum, ASPH can be processed into two different forms.

**Function:**
ASPH is thought to play an important role in calcium homeostasis. Alternative splicing of this gene results in five transcript variants which vary in protein translation, the coding of catalytic domains, and tissue expression. Variation among these transcripts impacts their functions which involve roles in the calcium storage and release process in the endoplasmic and sarcoplasmic reticulum as well as hydroxylation of aspartic acid and asparagine in epidermal growth factor like domains of various proteins.

**Product Detail**

**Subunit:**
Monomer (By similarity). Isoform 8 interacts with ORAI1 and STIM1.

**Subcellular Location:**
Isoform 1: Endoplasmic reticulum membrane; Single-pass type II membrane protein.
Isoform 8: Endoplasmic reticulum membrane; Single-pass type II membrane protein.

**Tissue Specificity:**
Isoform 1 is detected in all tissues tested. Isoform 8 is mainly expressed in pancreas, heart, brain, kidney and liver. Isoform 8 is expressed in kidney (at protein level).

**Similarity:**
Endoplasmic reticulum; endoplasmic reticulum membrane; Single-pass type II membrane protein.

**SWISS:**
Q12797

**Gene ID:**
444

**Database links:**

Entrez Gene: 444 Human

Omim: 600582 Human

SwissProt: Q12797 Human

Unigene: 332422 Human