Recombinant ASPH protein (His tag)

Catalog Number	537989
Synonyms	Aspartate beta-hydroxylase; ASP beta-hydroxylase; Peptide-aspartate beta-dioxygenase
Species	Human
Expression System	E. coli
Accession	Q12797
Molecular Weight	Predictes a molecular mass of 50.98 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 53 kDa band.

Product Information

Sequence Region	330-758
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 330-758 aa (Q12797) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	This product is a high-purity recombinant protein fragment of Aspartyl/asparaginyl beta-hydroxylase (ASPH), encompassing residues 330-758. Derived from human ASPH, this 429-amino acid fragment is engineered for stability and solubility, making it an ideal tool for structural studies, enzymatic assays, and biochemical research targeting hydroxylase activity. Aspartyl/asparaginyl beta-hydroxylase (ASPH), encoded by the ASPH gene in humans, is a multifunctional enzyme that specifically hydroxylates aspartate or asparagine residues within epidermal growth factor-like (EGF) domains of various proteins, playing a critical role in post-translational modifications. Isoform 1, localized to the endoplasmic reticulum membrane as a single-pass type II membrane protein, contributes to protein maturation and signaling pathways. Additionally, ASPH isoforms, such as Isoform 8, function as membrane-bound calcium-sensing proteins, regulating calcium release-activated calcium (CRAC) channels in T-cells and maintaining ER-plasma membrane junctions. The full-length protein's involvement in hydroxylation and calcium signaling underscores its importance in cellular processes and potential relevance to disease mechanisms.