Recombinant CSAD protein (His tag)

Catalog Number	543969
Synonyms	Aspartate 1-decarboxylase; Cysteine-sulfinate decarboxylase; Sulfinoalanine decarboxylase
Species	Human
Expression System	E. coli
Accession	Q9Y600
Molecular Weight	Predictes a molecular mass of 56.68 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 58 kDa band.

Product Information

Sequence Region	1-493
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 1-493 aa (Q9Y600) 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-quality recombinant fragment of human Cysteine sulfinic acid decarboxylase (CSAD), covering amino acids 1-493. It is designed for robust use in structural and biochemical studies, offering a stable and soluble unit that retains key functional domains for investigating enzymatic decarboxylation activities. Cysteine sulfinic acid decarboxylase, encoded by the CSAD gene in Homo sapiens, catalyzes the decarboxylation of substrates such as L-aspartate, 3-sulfino-L-alanine (cysteine sulfinic acid), and L-cysteate, producing beta-alanine, hypotaurine, and taurine, respectively. The enzyme demonstrates a preference for 3-sulfino-L-alanine as its primary substrate and does not act on glutamate, highlighting its specificity in biosynthetic pathways related to taurine and other metabolites. This protein plays a critical role in amino acid metabolism, contributing to the regulation of essential biological processes.