Recombinant CDD protein (His tag)

Catalog Number	537682
Synonyms	Cytidine aminohydrolase
Species	Human
Expression System	E. coli
Accession	P32320
Molecular Weight	Predictes a molecular mass of 17.84 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 18 kDa band.

Product Information

Sequence Region	1-146
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 1-146 aa (P32320) 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	Recombinant Human Cytidine Deaminase (EC 3.5.4.5) Fragment (residues 1-146) is a high-purity protein designed to encompass the complete CMP/dCMP-type deaminase domain. This fragment serves as an essential tool for investigating cytidine and 2'-deoxycytidine metabolism, UMP synthesis pathways, and enzymatic mechanisms in a controlled research setting. Cytidine deaminase (encoded by the CDA gene) is a key enzyme in nucleotide metabolism, responsible for scavenging both exogenous and endogenous cytidine and 2'-deoxycytidine to support UMP synthesis. This catalytic activity plays a critical role in maintaining nucleotide balance and has implications for nucleic acid metabolism and related cellular processes. The enzyme's function is supported by multiple experimental evidences (PubMed:7923172, PubMed:9596658).