Recombinant OAZ2 protein (His tag)

Catalog Number	549166
Synonyms	AZ2; ODC-Az 2
Species	Human
Expression System	E. coli
Accession	O95190
Molecular Weight	Predictes a molecular mass of 17.17 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 18 kDa band.

Product Information

Sequence Region	53-189
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 53-189 aa (O95190) 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 recombinant protein is a fragment of human Ornithine decarboxylase antizyme 2 (AZ2), encompassing amino acids 53-189. It has been computationally designed to provide a stable and soluble unit, ideal for structural studies and biochemical assays investigating polyamine metabolism regulation. Ornithine decarboxylase antizyme 2 (AZ2) is a key regulatory protein in human cells that controls intracellular polyamine levels by inhibiting ornithine decarboxylase (ODC) activity. It binds to ODC monomers, preventing their assembly into functional homodimers and thereby suppressing polyamine biosynthesis. Unlike other antizymes, AZ2 does not promote ODC degradation, allowing for rapid restoration of ODC activity. AZ2 is also involved in the translocation of AZIN2 from the ER-Golgi intermediate compartment to the cytosol and is localized in the nucleus, underscoring its role in cellular polyamine homeostasis and potential implications in cell growth and differentiation processes.