Recombinant DCOR protein (His tag)

Catalog Number	534316
Synonyms	ODC
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	P41931
Gene ID	179079
Molecular Weight	Predictes a molecular mass of 48.58 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 51 kDa band.

Product Information

Sequence Region	1-422
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 1-422 aa (P41931) 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 Ornithine decarboxylase (ODC) fragment from Caenorhabditis elegans (residues 1-422) is a high-purity, stable protein designed for structural and biochemical studies. This fragment retains the catalytic activity essential for polyamine biosynthesis, enabling researchers to investigate the rate-limiting step in this critical metabolic pathway. Ornithine decarboxylase (ODC) catalyzes the first and rate-limiting step in polyamine biosynthesis by converting ornithine to putrescine, which serves as the precursor for spermidine and spermine. Polyamines are fundamental to cellular processes, including DNA replication, cell proliferation, and apoptosis, making ODC a key enzyme in metabolic regulation and cellular homeostasis. The provided fragment (residues 1-422) encompasses the full functional domain, ensuring it is suitable for in-depth analysis of its enzymatic mechanisms and structural features.