Recombinant STDH4 protein (His tag)

Catalog Number	536652
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	O16925
Gene ID	184934
Molecular Weight	Predictes a molecular mass of 31.18 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 31 kDa band.

Product Information

Sequence Region	1-263
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 1-263 aa (O16925) 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 Putative Steroid Dehydrogenase 4 (EC 1.1.1.-) fragment (amino acids 1-263) from Caenorhabditis elegans, designed for structural and biochemical studies. This stable and soluble fragment, encoded by the stdh-4 gene, is ideal for investigating dehydrogenase mechanisms and protein interactions. The full-length Putative Steroid Dehydrogenase 4, identified in Caenorhabditis elegans with UniProt ID O16925, is classified under EC 1.1.1.-, indicating its potential role in oxidoreductase activity, particularly in steroid metabolism. While specific functional and subcellular localization details are not fully characterized, steroid dehydrogenases generally contribute to critical biological processes such as hormone regulation and metabolic pathways. The provided fragment (residues 1-263) encompasses the complete domain of interest, selected computationally to ensure stability and solubility, facilitating research into its enzymatic properties and broader biological significance.