Recombinant APY1 protein (His tag)

Catalog Number	531651
Synonyms	Uridine-diphosphatase; UDPase
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	Q19202
Gene ID	181019
Molecular Weight	Predictes a molecular mass of 37.72 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 40 kDa band.

Product Information

Sequence Region	38-355
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 38-355 aa (Q19202) 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 Apyrase apy-1 (EC 3.6.1.6) fragment (residues 38-355) from Caenorhabditis elegans, offering a stable and soluble unit optimized for structural and biochemical studies of this important nucleotide-hydrolyzing enzyme. Apyrase apy-1 is a uridine-diphosphatase (UDPase) that primarily hydrolyzes UDP and, to a lesser extent, GDP. This enzyme plays a crucial role in protein quality control within the endoplasmic reticulum by preventing the accumulation of nucleoside diphosphates (NDPs), thereby promoting the reglucosylation of incompletely folded glycoproteins during the unfolded protein response. The full-length protein is localized to the endomembrane system and functions as a single-pass type II membrane protein, highlighting its integral role in cellular protein folding and stress response mechanisms.