Recombinant DPH7 protein (His tag)

Catalog Number	549630
Synonyms	Diphthamide biosynthesis protein 7; WD repeat-containing protein 85
Species	Human
Expression System	E. coli
Accession	Q9BTV6
Molecular Weight	Predictes a molecular mass of 40.50 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 41 kDa band.

Product Information

Sequence Region	1-345
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 1-345 aa (Q9BTV6) 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 product features a stable and soluble fragment (residues 1-345) of human Diphthine methyltransferase (DPH7), optimized for structural and biochemical studies. It supports research into diphthamide biosynthesis and toxin susceptibility mechanisms. Diphthine methyltransferase (encoded by DPH7) catalyzes the demethylation of diphthine methyl ester to form diphthine, a key intermediate in diphthamide biosynthesis. Diphthamide is a conserved post-translational modification of histidine in translation elongation factor 2 (EEF2), which enables ADP-ribosylation by bacterial toxins like diphtheria toxin and Pseudomonas exotoxin A. This modification is critical for understanding cellular vulnerability to pathogens and protein modification pathways.