Recombinant DUS8 protein (His tag)

Catalog Number	542617
Synonyms	Dual specificity protein phosphatase hVH-5
Species	Human
Expression System	E. coli
Accession	Q13202
Molecular Weight	Predictes a molecular mass of 35.32 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 35 kDa band.

Product Information

Sequence Region	1-307
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 1-307 aa (Q13202) 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 Dual specificity protein phosphatase 8 (DUSP8) fragment (residues 1-307) from Homo sapiens, encompassing the full Rhodanese and Tyrosine-protein phosphatase domains. This high-purity protein is an essential tool for investigating domain-specific phosphatase functions, MAPK signaling regulation, and enzymatic mechanisms in cellular studies. Dual specificity protein phosphatase 8 (DUSP8) is a human enzyme with dual catalytic activity (EC 3.1.3.16 and EC 3.1.3.48) that dephosphorylates phosphotyrosine, phosphoserine, and phosphothreonine residues. It negatively regulates mitogen-activated protein kinase (MAPK) activity through dephosphorylation, playing a critical role in controlling MAPK signaling pathways. The protein localizes to both the cytoplasm and nucleus, suggesting involvement in diverse cellular processes across multiple compartments. This recombinant fragment preserves the complete functional domains responsible for its phosphatase activity, enabling targeted studies of its regulatory mechanisms.