Recombinant DUSP2 protein (His tag)

Catalog Number	542560
Synonyms	Dual specificity protein phosphatase PAC-1
Species	Human
Expression System	E. coli
Accession	Q05923
Molecular Weight	Predictes a molecular mass of 36.06 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 36 kDa band.

Product Information

Sequence Region	1-314
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 1-314 aa (Q05923) 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 2 (DUSP2) fragment (residues 1-314) from Homo sapiens, encompassing the full Rhodanese and Tyrosine-protein phosphatase domains. This high-purity protein is ideal for investigating MAPK1 dephosphorylation and domain-specific functions in signaling pathways. Dual specificity protein phosphatase 2 (DUSP2), encoded by the DUSP2 gene in humans, dephosphorylates both phosphothreonine and phosphotyrosine residues in MAPK1, with a slightly faster activity toward phosphotyrosine. This enzyme plays a critical role in regulating mitogen-activated protein kinase (MAPK) signaling pathways, which are involved in cellular processes such as proliferation, differentiation, and stress responses. DUSP2 is localized to the nucleus, indicating its potential role in modulating nuclear MAPK activity and gene expression. The recombinant fragment (1-314) retains key functional domains, making it a valuable tool for studying phosphatase mechanisms and MAPK pathway regulation.