Recombinant DUS10 protein (His tag)

Catalog Number	548626
Synonyms	Mitogen-activated protein kinase phosphatase 5; MAP kinase phosphatase 5; MKP-5
Species	Human
Expression System	E. coli
Accession	Q9Y6W6
Molecular Weight	Predictes a molecular mass of 20.42 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 20 kDa band.

Product Information

Sequence Region	319-482
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 319-482 aa (Q9Y6W6) 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 Human DUSP10 (319-482) Fragment: A high-purity protein fragment encompassing the Tyrosine-protein phosphatase domain of Dual specificity protein phosphatase 10 (MKP-5), optimized for studying p38 MAPK inactivation mechanisms. Dual specificity protein phosphatase 10 (DUSP10/MKP-5) is a key regulatory enzyme that inactivates MAP kinases through dephosphorylation, demonstrating particular specificity for the p38 subfamily (MAPK11/12/13/14). This phosphatase plays a critical role in controlling cellular stress responses and signaling pathways by preferentially targeting p38 MAPK. The protein localizes to both the cytoplasm and nucleus, allowing it to regulate MAPK signaling in multiple cellular compartments. The provided fragment (319-482) contains the complete Tyrosine-protein phosphatase domain, making it an ideal tool for investigating the structural and functional properties of this important regulatory domain in isolation.