Recombinant DUS16 protein (His tag)

Catalog Number	543543
Synonyms	Mitogen-activated protein kinase phosphatase 7; MAP kinase phosphatase 7; MKP-7
Species	Human
Expression System	E. coli
Accession	Q9BY84
Molecular Weight	Predictes a molecular mass of 35.44 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 35 kDa band.

Product Information

Sequence Region	1-302
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 1-302 aa (Q9BY84) 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 16 (DUSP16) fragment (amino acids 1-302) from Homo sapiens, designed to include the complete Rhodanese and Tyrosine-protein phosphatase domains. This fragment serves as an essential tool for investigating MAP kinase inactivation mechanisms and domain-specific functions in cellular signaling pathways. Dual specificity protein phosphatase 16 (DUSP16), also known as Mitogen-activated protein kinase phosphatase 7 (MKP-7), is a key enzyme involved in the inactivation of MAP kinases through dephosphorylation. It specifically dephosphorylates MAPK10 when bound to ARRB2, playing a regulatory role in mitogen-activated protein kinase signaling pathways. The protein localizes to the cytoplasm, nucleus, and cytoplasmic vesicles, and upon AGTR stimulation, it dissociates and re-associates with ARRB2 on endocytic vesicles, indicating its dynamic involvement in intracellular trafficking and signal transduction processes.