Recombinant DUS9 protein (His tag)

Catalog Number	541119
Synonyms	Mitogen-activated protein kinase phosphatase 4; MAP kinase phosphatase 4; MKP-4
Species	Human
Expression System	E. coli
Accession	Q99956
Molecular Weight	Predictes a molecular mass of 18.97 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 19 kDa band.

Product Information

Sequence Region	203-353
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 203-353 aa (Q99956) 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	Introducing the recombinant human Dual specificity protein phosphatase 9 (DUSP9) fragment (residues 203-353), a highly specific tool for investigating ERK family MAP kinase inactivation. This fragment is engineered to include the complete Tyrosine-protein phosphatase domain, enabling targeted study of its regulatory functions in cellular signaling pathways. Dual specificity protein phosphatase 9 (DUSP9), also known as MAP kinase phosphatase 4 (MKP-4), functions as a key regulator of mitogen-activated protein kinase (MAPK) signaling pathways. This enzyme specifically inactivates MAP kinases through dephosphorylation, with particular specificity for the ERK family members. Located primarily in the cytoplasm, DUSP9 plays a crucial role in controlling cellular responses to extracellular stimuli by modulating MAPK activity, thereby influencing various cellular processes including proliferation, differentiation, and stress responses.