Recombinant DUS22 protein (His tag)

Catalog Number	548350
Synonyms	JNK pathway associated phosphatase; JKAP; JNK-stimulatory phosphatase-1; JSP-1; Low molecular weight dual specificity phosphatase 2; LMW-DSP2; Mitogen-activated protein kinase phosphatase x; MAP kinase phosphatase x; MKP-x
Species	Human
Expression System	E. coli
Accession	Q9NRW4
Molecular Weight	Predictes a molecular mass of 22.43 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 22 kDa band.

Product Information

Sequence Region	2-184
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 2-184 aa (Q9NRW4) 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 22 (DUSP22) fragment (residues 2-184) is a high-purity protein designed for studying its tyrosine-protein phosphatase domain. This fragment activates JNK signaling and modulates T-cell receptor responses, making it an essential tool for kinase research and immune pathway analysis. Dual specificity protein phosphatase 22 (DUSP22) is a human enzyme that dephosphorylates both phosphotyrosine and phosphoserine/phosphothreonine residues. It activates the JNK signaling pathway and plays a critical role in regulating immune responses by inhibiting T-cell receptor signaling. This is achieved through dephosphorylation and degradation of E3 ubiquitin ligase UBR2, as well as inactivation of tyrosine kinase LCK. DUSP22 also modulates UBR2-mediated ubiquitination processes and may influence B-cell receptor signaling. The protein is localized in the cytoplasm, where it executes its regulatory functions in cellular signaling pathways.