Recombinant DKF2 protein (His tag)

Catalog Number	531992
Synonyms	D kinase family-2
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	O45818
Gene ID	180121
Molecular Weight	Predictes a molecular mass of 37.40 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 38 kDa band.

Product Information

Sequence Region	762-1070
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 762-1070 aa (O45818) 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 Serine/threonine-protein kinase dkf-2 fragment (residues 762-1070) from Caenorhabditis elegans, encompassing the complete Protein kinase domain. This high-purity fragment serves as an essential tool for investigating kinase activity, signal transduction mechanisms, and domain-specific functions in stress response and immunity pathways. Serine/threonine-protein kinase dkf-2 (EC 2.7.11.13) is a crucial signaling enzyme that converts transient diacylglycerol signals into sustained physiological effects downstream of PKC. In C. elegans, it regulates innate immunity by promoting PMK-1 activation and modulates stress response and lifespan through negative regulation of the daf-16 transcription factor. The protein localizes to both cytoplasm and membrane, with membrane translocation being essential for kinase activation. This fragment specifically contains the functional Protein kinase domain (residues 770-1026), enabling focused studies on its catalytic and regulatory roles in these pathways.