Recombinant DAPK2 protein (His tag)

Catalog Number	546189
Synonyms	DAP kinase 2; DAP-kinase-related protein 1; DRP-1
Species	Human
Expression System	E. coli
Accession	Q9UIK4
Molecular Weight	Predictes a molecular mass of 38.47 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 42 kDa band.

Product Information

Sequence Region	1-318
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 1-318 aa (Q9UIK4) 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 Death-associated protein kinase 2 (DAPK2) fragment (amino acids 1-318) is a high-purity protein encompassing the complete protein kinase domain. This fragment serves as an essential tool for investigating calcium/calmodulin-dependent signaling pathways regulating apoptosis, autophagy, and cell motility in research applications. Death-associated protein kinase 2 (DAPK2) is a calcium/calmodulin-dependent serine/threonine kinase that plays critical roles in multiple cellular signaling pathways determining cell fate. This enzyme regulates both caspase-dependent type I apoptotic cell death and caspase-independent type II autophagic cell death, functioning as a key mediator of anoikis and suppressor of malignant epithelial cell growth. DAPK2 also contributes to granulocytic maturation and controls granulocytic motility through regulation of cell spreading and polarization. The protein localizes to the cytoplasm and autophagosome lumen, where it integrates calcium signaling with cell death and survival decisions. The provided fragment (1-318) contains the complete protein kinase domain (23-285), enabling focused study of kinase-specific functions without regulatory influences from other protein regions.