Recombinant DGKD protein (His tag)

Catalog Number	540382
Synonyms	DAG kinase delta; 130 kDa diacylglycerol kinase; Diglyceride kinase delta; DGK-delta
Species	Human
Expression System	E. coli
Accession	Q16760
Molecular Weight	Predictes a molecular mass of 10.20 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 11 kDa band.

Product Information

Sequence Region	1140-1214
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 1140-1214 aa (Q16760) 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 Diacylglycerol Kinase Delta (DGKD) Fragment - a 75-amino acid protein fragment (residues 1140-1214) containing the complete SAM domain. This high-purity recombinant protein serves as an essential tool for investigating the structural and functional properties of DGKD's SAM domain in lipid signaling pathways. Diacylglycerol kinase delta (DGKD) is a crucial enzyme that converts diacylglycerol (DAG) into phosphatidic acid (PA), thereby regulating the balance between these two bioactive lipids. This conversion acts as a central switch between distinct signaling pathways with opposing biological effects. DGKD modulates several important cellular processes including PKC and EGF receptor signaling pathways, and plays a vital role in development. The enzyme also appears to regulate clathrin-dependent endocytosis. DGKD localizes to multiple cellular compartments including membranes, clathrin-coated pits, and the cytoplasm, with isoform 1 showing phorbol ester-induced translocation from cytoplasm to plasma membrane. The full-length protein's ability to shuttle between compartments underscores its dynamic role in cellular signaling networks.