Recombinant PKDCC protein (His tag)

Catalog Number	547402
Synonyms	Protein kinase domain-containing protein, cytoplasmic; Protein kinase-like protein SgK493; Sugen kinase 493; Vertebrate lonesome kinase
Species	Human
Expression System	E. coli
Accession	Q504Y2
Molecular Weight	Predictes a molecular mass of 42.60 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 43 kDa band.

Product Information

Sequence Region	128-493
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 128-493 aa (Q504Y2) 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 PKDCC Fragment (128-493) is a high-purity protein designed for studying the extracellular tyrosine-protein kinase activity of PKDCC. This fragment encompasses the complete protein kinase domain (138-493), making it an ideal tool for investigating kinase function, substrate phosphorylation, and signaling mechanisms in developmental and cellular processes. Extracellular tyrosine-protein kinase PKDCC (encoded by the PKDCC gene) is a secreted kinase that phosphorylates extracellular proteins and endogenous proteins within the secretory pathway, playing a critical role in organogenesis patterning. It mediates phosphorylation of matrix metalloproteinases (MMP1, MMP13, MMP14, MMP19) and ERP29, and is rapidly secreted from platelets upon degranulation stimulation. PKDCC is essential for longitudinal bone growth through regulation of chondrocyte differentiation and may also have serine/threonine kinase activity. It is localized to the secretory pathway, including the Golgi apparatus, and may be involved in protein transport from the Golgi to the plasma membrane, underscoring its importance in developmental biology and cellular signaling.