Recombinant RIPK4 protein (His tag)

Catalog Number	547105
Synonyms	Ankyrin repeat domain-containing protein 3; PKC-delta-interacting protein kinase
Species	Human
Expression System	E. coli
Accession	P57078
Molecular Weight	Predictes a molecular mass of 34.78 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 35 kDa band.

Product Information

Sequence Region	1-290
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 1-290 aa (P57078) 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	Introducing the Recombinant Human RIPK4 Kinase Domain (residues 1-290), a high-purity protein fragment designed for studying the catalytic activity and functional roles of Receptor-interacting serine/threonine-protein kinase 4. This product encompasses the complete protein kinase domain, offering researchers a precise tool to investigate kinase-mediated signaling pathways, cell differentiation, and NF-kappa-B activation mechanisms. Receptor-interacting serine/threonine-protein kinase 4 (RIPK4), encoded by the gene RIPK4 in Homo sapiens, is a serine/threonine protein kinase crucial for embryonic skin development and adult skin homeostasis. It promotes keratinocyte differentiation and cell adhesion through phosphorylation of plakophilin-1 (PKP1) and serves as a direct transcriptional target of TP63. Additionally, RIPK4 plays a role in NF-kappa-B activation, highlighting its importance in cellular signaling and developmental processes. The protein is primarily localized in the cytoplasm and associates with the membrane as a peripheral membrane protein. The provided fragment (residues 1-290) includes the full protein kinase domain (residues 22-286), enabling focused research on its catalytic functions and domain-specific interactions.