Recombinant ILK protein (His tag)

Catalog Number	547262
Synonyms	ILK-1; ILK-2; Inactive integrin-linked kinase; p59ILK
Species	Human
Expression System	E. coli
Accession	Q13418
Molecular Weight	Predictes a molecular mass of 53.08 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 53 kDa band.

Product Information

Sequence Region	1-452
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 1-452 aa (Q13418) 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 Scaffold protein ILK (ILK-1/ILK-2), a full-length fragment (amino acids 1-452) encompassing the complete protein kinase domain. This high-purity protein is an essential tool for studying integrin-mediated signaling, focal adhesion dynamics, and cytoskeletal reorganization in cellular migration and adhesion processes. The integrin-linked kinase (ILK) functions as a critical scaffold protein in Homo sapiens, mediating protein-protein interactions during focal adhesion assembly, cell adhesion, and migration. It recruits PARVA and LIMS1 to form the heterotrimeric IPP complex, which binds F-actin to promote cytoskeletal bundling and force generation for cell spreading. ILK regulates integrin activation and acts as an upstream effector of AKT1 and GSK3 signaling pathways. It localizes to focal adhesions, the cell membrane, lamellipodia, cytoplasm, nucleus, and centrosome, playing roles in mitotic spindle integrity and caveolae trafficking. The full-length fragment (1-452) includes the protein kinase domain, enabling comprehensive investigation of ILK's scaffolding and regulatory functions.