Recombinant NUAK2 protein (His tag)

Catalog Number	548205
Synonyms	Omphalocele kinase 2; SNF1/AMP kinase-related kinase; SNARK
Species	Human
Expression System	E. coli
Accession	Q9H093
Molecular Weight	Predictes a molecular mass of 35.91 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 36 kDa band.

Product Information

Sequence Region	40-337
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 40-337 aa (Q9H093) 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 NUAK2 Kinase Fragment (40-337) is a high-purity protein encompassing the complete protein kinase domain of human NUAK family SNF1-like kinase 2. This fragment serves as an essential tool for investigating kinase activity, stress response pathways, and Hippo signaling regulation in cellular and biochemical assays. NUAK2 is a stress-activated serine/threonine kinase critical for cellular adaptation to glucose starvation and plays a significant role in cytoskeletal dynamics by promoting F-actin to G-actin conversion. It is induced by CD95 and TNF-α via NF-κB signaling, where it confers protection against CD95-mediated apoptosis while enhancing tumor cell motility and invasiveness. NUAK2 phosphorylates LATS1/2 kinases and regulates YAP1 nuclear localization through the Hippo pathway, with demonstrated importance in embryonic neural tube closure. This positions NUAK2 as a key regulator of cell survival, motility, and developmental processes.