Recombinant PIM3 protein (His tag)

Catalog Number	543050
Species	Human
Expression System	E. coli
Accession	Q86V86
Molecular Weight	Predictes a molecular mass of 31.20 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 32 kDa band.

Product Information

Sequence Region	33-296
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 33-296 aa (Q86V86) 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 Serine/threonine-protein kinase pim-3 (EC 2.7.11.1) Fragment (residues 33-296) is a high-quality protein product designed for studying kinase activity and domain-specific functions. This 264-amino acid fragment fully encompasses the protein kinase domain, making it an ideal tool for apoptosis, cell survival, and tumorigenesis research. Serine/threonine-protein kinase pim-3, encoded by the PIM3 gene in Homo sapiens, functions as a proto-oncogene that prevents apoptosis and promotes cell survival and protein translation. It contributes to tumorigenesis through multiple mechanisms, including phosphorylation of BAD to release anti-apoptotic Bcl-X(L), regulation of cell cycle progression, protein synthesis, and modulation of MYC transcriptional activity. Additionally, it negatively regulates insulin secretion by inhibiting MAPK1/3 (ERK1/2) activation via SOCS6 and plays a role in energy metabolism by modulating AMPK activity to control MYC and PPARGC1A protein levels and cell growth. The protein is localized in the cytoplasm, as indicated by experimental evidence.