Recombinant IBTK protein (His tag)

Catalog Number	543790
Synonyms	IBtk
Species	Human
Expression System	E. coli
Accession	Q9P2D0
Molecular Weight	Predictes a molecular mass of 28.37 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 29 kDa band.

Product Information

Sequence Region	715-951
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 715-951 aa (Q9P2D0) 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 Inhibitor of Bruton tyrosine kinase (IBtk) Fragment (residues 715-951) is a high-purity protein designed for functional studies of the BTB 2 domain. This fragment serves as an essential tool for researchers investigating B-cell development and BTK-mediated signaling pathways. The full-length IBtk protein, encoded by the IBTK gene in Homo sapiens, acts as a key regulator of B-cell development by inhibiting BTK tyrosine kinase activity. It down-regulates BTK-mediated calcium mobilization and NF-kappa-B-driven transcription, playing a critical role in immune signaling. IBtk is primarily localized in the cytoplasm and functions as a peripheral membrane protein, translocating to the plasma membrane upon IgM stimulation. Isoform 2 exhibits nuclear localization, suggesting potential additional regulatory roles. The provided fragment (715-951) encompasses the BTB 2 domain, enabling focused investigation of this specific functional region.