Recombinant BTBDA protein (His tag)

Catalog Number	549901
Synonyms	Glucose metabolism-related protein 1
Species	Human
Expression System	E. coli
Accession	Q9BSF8
Molecular Weight	Predictes a molecular mass of 31.96 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 35 kDa band.

Product Information

Sequence Region	149-408
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 149-408 aa (Q9BSF8) 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 BTB/POZ domain-containing protein 10 (BTBD10) fragment (aa 149-408) from Homo sapiens, encompassing the complete BTB domain. This high-purity protein is an essential tool for investigating AKT activation mechanisms, neuronal survival, and pancreatic beta cell growth in metabolic and neurological research. BTB/POZ domain-containing protein 10 (BTBD10) functions as a key regulator of AKT signaling by inhibiting PPP2CA-mediated dephosphorylation, thereby maintaining AKT in its activated state. This activity contributes critically to preventing motor neuron death and promoting pancreatic beta cell proliferation, highlighting its importance in neuroprotection and glucose metabolism. The protein localizes to both the nucleus and cytoplasm, with studies indicating colocalization with KCTD20 in filamentous structures. The provided fragment (aa 149-408) specifically contains the BTB domain (aa 167-241), enabling focused studies on domain-specific interactions and functional mechanisms.