Recombinant BEX1 protein (His tag)

Catalog Number	545986
Synonyms	Brain-expressed X-linked protein 1
Species	Human
Expression System	E. coli
Accession	Q9HBH7
Molecular Weight	Predictes a molecular mass of 10.34 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 11 kDa band.

Product Information

Sequence Region	55-125
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 55-125 aa (Q9HBH7) 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 BEX1 (Brain-expressed X-linked protein 1) Fragment (aa 55-125) is a highly stable and soluble protein unit designed for structural and biochemical studies. This 71-amino acid fragment enables researchers to investigate the signaling adapter functions of BEX1 in neuronal differentiation and cell cycle regulation with enhanced experimental versatility. BEX1 is a signaling adapter molecule integral to p75NTR/NGFR signaling pathways in humans. It regulates cell cycle progression and neuronal differentiation, notably inhibiting differentiation in response to nerve growth factor (NGF). BEX1 serves as a critical link between neurotrophic factor signaling and internal cellular states, coordinating biological responses to external cues. Under non-stress conditions, it acts as a pseudosubstrate for the CRL2(FEM1B) complex by binding FEM1B via zinc, preventing substrate association. The protein dynamically shuttles between the nucleus and cytoplasm, with predominant nuclear localization, reflecting its role in modulating receptor signaling and cellular adaptation.