Recombinant BEX2 protein (His tag)

Catalog Number	548157
Synonyms	Brain-expressed X-linked protein 2; hBex2
Species	Human
Expression System	E. coli
Accession	Q9BXY8
Molecular Weight	Predictes a molecular mass of 10.32 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 11 kDa band.

Product Information

Sequence Region	58-128
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 58-128 aa (Q9BXY8) 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 BEX2 (Brain-expressed X-linked protein 2) Fragment (aa 58-128) is a high-quality protein product designed for researchers studying mitochondrial apoptosis regulation and cell cycle progression in breast cancer. This 71-amino acid fragment has been computationally optimized for stability and solubility, making it ideal for structural studies and biochemical assays. BEX2 is a key regulator of mitochondrial apoptosis and G1 cell cycle progression in breast cancer cells, functioning through modulation of BCL2 family proteins. It upregulates anti-apoptotic BCL2 while downregulating pro-apoptotic BAD, BAK1, and PUMA, thereby protecting breast cancer cells from apoptosis. Additionally, BEX2 regulates cell cycle progression through CCND1 and CDKN1A and influences PP2A phosphatase activity by controlling the level of PP2A regulatory subunit B. Under normal conditions, BEX2 acts as a pseudosubstrate for the CRL2(FEM1B) complex, preventing substrate association. The protein localizes to both the cytoplasm and nucleus, supporting its diverse regulatory roles in cellular processes.