Recombinant SEC20 protein (His tag)

Catalog Number	544894
Synonyms	BCL2/adenovirus E1B 19 kDa protein-interacting protein 1; Transformation-related gene 8 protein; TRG-8
Species	Human
Expression System	E. coli
Accession	Q12981
Molecular Weight	Predictes a molecular mass of 24.43 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 25 kDa band.

Product Information

Sequence Region	1-199
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 1-199 aa (Q12981) 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 BNIP1 (SEC20) Fragment (aa 1-199) - A high-quality, stable protein fragment of Vesicle transport protein SEC20, essential for studying endoplasmic reticulum membrane fusion, apoptosis regulation, and mitochondrial autophagy mechanisms in cellular processes. Vesicle transport protein SEC20 (BNIP1) is a multifunctional protein involved in critical cellular processes. As part of a SNARE complex, it participates in endoplasmic reticulum membrane fusion and maintenance of endoplasmic reticulum organization. The protein also plays significant roles in apoptosis, particularly in endoplasmic reticulum stress-induced cell death pathways. Additionally, BNIP1 functions as a substrate of RNF185 and interacts with SQSTM1, suggesting involvement in mitochondrial autophagy processes. The protein localizes to both endoplasmic reticulum and mitochondrial membranes as a single-pass type IV membrane protein, with mitochondrial localization regulated by RNF186. This strategic positioning allows BNIP1 to coordinate cellular responses between these two organelles during stress conditions and programmed cell death.