Recombinant RTN3 protein (His tag)

Catalog Number	539610
Synonyms	Homolog of ASY protein; HAP; Neuroendocrine-specific protein-like 2; NSP-like protein 2; Neuroendocrine-specific protein-like II; NSP-like protein II; NSPLII
Species	Human
Expression System	E. coli
Accession	O95197
Molecular Weight	Predictes a molecular mass of 23.01 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 23 kDa band.

Product Information

Sequence Region	844-1032
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 844-1032 aa (O95197) 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 Reticulon-3 (RTN3) Fragment (aa 844-1032) - A high-purity protein fragment encompassing the complete reticulon domain, ideal for studying membrane trafficking, BACE1 inhibition, and endoplasmic reticulum dynamics in neurological and inflammatory research. Reticulon-3 (RTN3) is a multi-pass membrane protein primarily localized to the endoplasmic reticulum and Golgi apparatus membranes in human cells. This protein plays crucial roles in membrane trafficking within the early secretory pathway and serves as a key inhibitor of BACE1 activity, thereby regulating amyloid precursor protein processing - a significant pathway in neurological research. RTN3 also functions in apoptosis induction through caspase-8 cascade activation and facilitates BCL2 translocation to mitochondria during endoplasmic reticulum stress. Additionally, it acts as an inflammation-resolving regulator by interacting with TRIM25 and RIGI, impairing RIGI polyubiquitination and subsequently inhibiting IRF3 and NF-kappa-B signaling pathways. The protein also contributes to endoplasmic reticulum tubule formation and has been implicated in supporting viral replication of enteroviruses.