Recombinant ITM2C protein (His tag)

Catalog Number	539041
Synonyms	Cerebral protein 14; Transmembrane protein BRI3
Species	Human
Expression System	E. coli
Accession	Q9NQX7
Molecular Weight	Predictes a molecular mass of 24.20 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 25 kDa band.

Product Information

Sequence Region	76-267
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 76-267 aa (Q9NQX7) 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 ITM2C (Integral Membrane Protein 2C) Fragment (aa 76-267) is a high-purity protein designed for studying the BRICHOS domain's role in regulating amyloid-beta production and neuronal processes. This fragment serves as an essential tool for investigating specific domain functions in neurodegenerative and cell death pathways. Integral Membrane Protein 2C (ITM2C), also known as Transmembrane Protein BRI3, is a single-pass type II membrane protein localized to the lysosome and cell membrane in humans. It functions as a negative regulator of amyloid-beta peptide production by inhibiting APP processing through blockage of alpha- and beta-secretase access. While it shows negligible inhibition of gamma-secretase cleavage, ITM2C plays significant roles in TNF-induced cell death and neuronal differentiation. The protein is cleaved to produce CT-BRI3, further emphasizing its relevance in cellular regulation and neurological research.