Recombinant TPSNR protein (His tag)

Catalog Number	548141
Synonyms	TAPASIN-R; TAP-binding protein-like; TAP-binding protein-related protein; TAPBP-R; Tapasin-like
Species	Human
Expression System	E. coli
Accession	Q9BX59
Molecular Weight	Predictes a molecular mass of 43.13 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 43 kDa band.

Product Information

Sequence Region	19-405
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 19-405 aa (Q9BX59) 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 Tapasin-related protein (TAPASIN-R) fragment (residues 19-405) is a high-purity protein designed for studying antigen processing and presentation. This fragment includes the complete Ig-like V-type and Ig-like C1-type domains, making it an ideal tool for investigating MHC class I interactions and peptide-loading mechanisms in immunological research. Tapasin-related protein (TAPBPL) is a key component of the antigen processing and presentation pathway, binding directly to MHC class I molecules complexed with beta2-microglobulin. Unlike classical tapasin, TAPBPR functions independently of the peptide-loading complex (PLC), playing a unique regulatory role in MHC I antigen presentation. The protein is primarily localized to the endoplasmic reticulum membrane as a single-pass type I membrane protein, with additional presence in the Golgi apparatus, microsome membranes, and minor expression on the cell surface, reflecting its dynamic involvement in intracellular trafficking and immune recognition processes.