Recombinant RTP4 protein (His tag)

Catalog Number	545662
Synonyms	28 kDa interferon-responsive protein; 3CxxC-type zinc finger protein 4
Species	Human
Expression System	E. coli
Accession	Q96DX8
Molecular Weight	Predictes a molecular mass of 20.70 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 21 kDa band.

Product Information

Sequence Region	1-163
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 1-163 aa (Q96DX8) 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 Receptor-transporting protein 4 (RTP4) fragment (amino acids 1-163) from Homo sapiens, offering a stable and soluble unit for studying its roles in GPCR trafficking and antiviral defense mechanisms. This fragment is ideal for structural and biochemical investigations. Receptor-transporting protein 4 (RTP4) is a multifunctional chaperone that facilitates the trafficking and functional cell surface expression of select G-protein coupled receptors (GPCRs), including the bitter taste receptor TAS2R16 and opioid receptor heterodimer OPRD1-OPRM1. Additionally, RTP4 acts as a potent interferon-inducible suppressor of pathogens such as rabies, influenza A, and yellow fever viruses by associating with viral replicases, binding viral RNA, and inhibiting genome amplification at the endoplasmic reticulum. It also restores antiviral signaling by sequestering influenza A virus NS1 protein. RTP4 is localized to the membrane as a single-pass type III membrane protein and can also be found in the cytoplasm, underscoring its diverse roles in cellular defense and receptor regulation.