Recombinant RFTN2 protein (His tag)

Catalog Number	550896
Synonyms	Raft-linking protein 2
Species	Human
Expression System	E. coli
Accession	Q52LD8
Molecular Weight	Predictes a molecular mass of 19.88 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 20 kDa band.

Product Information

Sequence Region	2-164
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 2-164 aa (Q52LD8) 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 Raftlin-2 (Raft-linking protein 2) fragment (amino acids 2-164) is a high-quality, soluble protein designed for structural and functional studies. This 163-amino acid fragment, derived from human RFTN2, retains key features for investigating its role in immune signaling pathways, including Toll-like receptor 4 (TLR4) internalization and B-cell receptor signaling. Raftlin-2, encoded by the RFTN2 gene in Homo sapiens, is a membrane-associated protein that plays a critical role in immune responses. Upon bacterial lipopolysaccharide stimulation, it mediates clathrin-dependent internalization of TLR4 in dendritic cells, leading to TICAM1-mediated signaling and subsequent IFNB1 production. Additionally, Raftlin-2 may regulate B-cell antigen receptor-mediated signaling. The protein is localized to the cell membrane via a lipid anchor, positioning it to facilitate key signaling events in immune cell activation. The recombinant fragment (amino acids 2-164) was computationally selected to represent a stable, soluble unit ideal for elucidating the protein's biochemical and structural properties.