

# Recombinant Human RFTN1 Protein

**For Research Use Only**

## 1. Basic Product Information

Catalog No.: REP50843

Size: 10ug, 100ug

Protein Name: Raftlin (Cell migration-inducing gene 2 protein) (Raft-linking protein)

Synonym: RFTN1, KIAA0084, MIG2

UniProt ID: Q14699

UniProt Link: [www.uniprot.org/uniprotkb/Q14699/entry](http://www.uniprot.org/uniprotkb/Q14699/entry)

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 578 AA

Molecular Weight: 63 KD

Protein Tag: C-terminal His6

## 2. Amino Acid Sequence

MGCGLNKLKRD EKRPGNIYSTLKRPQVETKIDVSYEYRFLEF TTLSAAELPGSSAVRLASLRDLPAQ  
LLELYQQGFSLAALHPFVQPTHEREKTPLEHIFRAILIKKTDRSQKTDLHNEG YILELDCCSSLDHPTD  
QKLIPEFIKKIQEAASQGLKFVGVIPQYHSSVNSAGSSAPVSTANSTEDARDAKNARGDHASLENEKP  
GTGDVCSAPAGRNQSPEPSSGPRGEVPLAKQPSSPSGEGDGGELSPQGVSKTLDGPESNP LEVH  
EEPLSGKMEIFTLFNPKSHQKCRQYYPVTIPLHVSKNGQTVSGLDANWLEHMSDHFRKGGMLVNA  
VFYLGIVNDSLHGLTDGVFIFEAVSTEDSKTIQGYDAIVVEQWTVLEGVEVQTDYVPLLNSLAAYGWQ  
LTCVLPTPVVKT TSEGSVSTKQIVFLQRPCLPQKIKKKESKFQWRFSREEMHNRQMRKSKGKLSAR  
DKQQAEEENEKNLEDQSSKAGDMGNCVSGQQQEGGVSEEMKGPVQEDKGEQLSPGGLLCGVGVE  
GEAVQNGPASHSRALVGICTGHSNPGEDARDGDAEEVRELGTVEEN

## 3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

## 4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

## 5. Product Description

This product is recombinant Raftlin (Cell migration-inducing gene 2 protein) (Raft-linking protein) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

**Protein Function:** Involved in protein trafficking via association with clathrin and AP2 complex (PubMed:21266579, PubMed:27022195). Upon bacterial lipopolysaccharide stimulation, mediates internalization of TLR4 to endosomes in dendritic cells and macrophages; and internalization of poly(I:C) to TLR3-positive endosomes in myeloid dendritic cells and epithelial cells; resulting in activation of TICAM1-mediated signaling and subsequent IFNB1 production (PubMed:21266579, PubMed:27022195). Involved in T-cell antigen receptor-mediated signaling by regulating tyrosine kinase LCK localization, T-cell dependent antibody production and cytokine secretion (By similarity). May regulate B-cell antigen receptor-mediated signaling (PubMed:12805216). May play a pivotal role in the formation and/or maintenance of lipid rafts (PubMed:12805216).

**Subcellular Localization:** Cell membrane ; Lipid-anchor . Cytoplasm . Membrane raft . Endosome . Early endosome . Note=Translocates from cytoplasm to cell membrane where it colocalizes with poly(I:C) and then moves to endosomes where it colocalizes with TLR3 (PubMed:21266579). Translocates from cytoplasm to cell membrane where it colocalizes with TLR4 and then together with TLR4 moves to endosomes, upon lipopolysaccharide stimulation (PubMed:27022195).

## 6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.