

Recombinant Mouse TCAM2 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51730

Size: 10ug, 100ug

Protein Name: TIR domain-containing adapter molecule 2 (TICAM-2) (TRIF-related adapter molecule) (Toll/interleukin-1 receptor domain-containing protein)

Synonym: Ticam2, Tirp, Tram

UniProt ID: Q8BJQ4

UniProt Link: www.uniprot.org/uniprotkb/Q8BJQ4/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 232 AA

Molecular Weight: 26 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MGVGKSKLDKCPLSWHKKDSVDADQDGHESDSKNSEEACLRGFVEQSSGSEPPTGEQDQPEAKG
AGPEEQDEEEFLKFVILHAEDDTDEALRVQDLLQNDFGIRPGIVFAEMPCGRLHLQNLDDAVNGSAW
TILLLTENFLRDTWCNFFQFYTSLMNSVSRQHKYNSVIPMRPLNSPLPRERTPLALQTINALEEESQGF
STQVERIFRESVFERQQSIWKETRVSQKQFIA

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 TIR domain-containing adapter molecule 2 (TICAM-2) (TRIF-related adapter molecule) (Toll/interleukin-1 receptor domain-containing 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: Functions as a sorting adapter in different signaling pathways to facilitate downstream signaling leading to type I interferon induction. In TLR4 signaling, physically bridges TLR4 and TICAM1 and functionally transmits signal to TICAM1 in early endosomes after endocytosis of TLR4. In TLR2 signaling, physically bridges TLR2 and MYD88 and is required for the TLR2-dependent movement of MYD88 to endosomes following ligand engagement. Involved in IL-18 signaling and is proposed to function as a sorting adapter for MYD88 in IL-18 signaling during adaptive immune response. Forms a complex with RAB11FIP2 that is recruited to the phagosomes to promote the activation of the actin-regulatory GTPases RAC1 and CDC42 and subsequent phagocytosis of Gram-negative bacteria.

Subcellular Localization: Cytoplasm . Golgi apparatus . Cell membrane . Early endosome . Late endosome . Endoplasmic reticulum . Cell projection, phagocytic cup . Note=Localized to the plasma membrane as a result of myristoylation.

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.