

TIMD4 / TIM4 / TIM-4 Antibody (C-Terminus)

Rabbit Polyclonal Antibody Catalog # ALS11488

Specification

TIMD4 / TIM4 / TIM-4 Antibody (C-Terminus) - Product Information

Application WB
Primary Accession Q96H15

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 42kDa KDa

TIMD4 / TIM4 / TIM-4 Antibody (C-Terminus) - Additional Information

Gene ID 91937

Other Names

T-cell immunoglobulin and mucin domain-containing protein 4, TIMD-4, T-cell immunoglobulin mucin receptor 4, TIM-4, T-cell membrane protein 4, TIMD4, TIM4

Target/Specificity

15 amino acid peptide from near the carboxy terminus of human TIM-4

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

Precautions

TIMD4 / TIM4 / TIM-4 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

TIMD4 / TIM4 / TIM-4 Antibody (C-Terminus) - Protein Information

Name TIMD4

Synonyms TIM4

Function

Phosphatidylserine receptor that plays different role in immune response including phagocytosis of apoptotic cells and T-cell regulation. Controls T-cell activation in a bimodal fashion, decreasing the activation of naive T-cells by inducing cell cycle arrest, while increasing proliferation of activated T-cells by activating AKT1 and ERK1/2 phosphorylations and subsequent signaling pathways (By similarity). Also plays a role in efferocytosis which is the process by which apoptotic cells are removed by phagocytic cells (PubMed:32703939, PubMed:34067457). Mechanistically, promotes the engulfment of apoptotic cells or exogenous particles by securing them to phagocytes through direct binding to phosphatidylserine present on apoptotic cells, while other engulfment receptors such as MERTK efficiently recognize



apoptotic cells and mediate their ingestion (PubMed:32640697). Additionally, promotes autophagy process by suppressing NLRP3 inflammasome activity via activation of LKB1/PRKAA1 pathway in a phosphatidylserine-dependent mechanism (By similarity).

Cellular Location

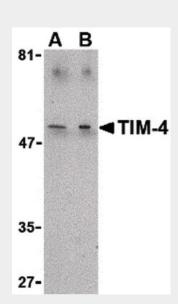
Cell membrane; Single-pass type I membrane protein. Secreted, extracellular exosome

TIMD4 / TIM4 / TIM-4 Antibody (C-Terminus) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

TIMD4 / TIM4 / TIM-4 Antibody (C-Terminus) - Images



Western blot of TIM-4 in Jurkat lysate with TIM-4 antibody at (A) 1 and (B) 2 ug/ml.

TIMD4 / TIM4 / TIM-4 Antibody (C-Terminus) - Background

Phosphatidylserine receptor that enhances the engulfment of apoptotic cells. Involved in regulating T-cell proliferation and lymphotoxin signaling. Ligand for HAVCR1/TIMD1 (By similarity).

TIMD4 / TIM4 / TIM-4 Antibody (C-Terminus) - References

Ota T., et al. Nat. Genet. 36:40-45(2004). Schmutz J., et al. Nature 431:268-274(2004).