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TIMD4 / TIM4 / TIM-4 Antibody (Internal)

Rabbit Polyclonal Antibody
Catalog # ALS11721

Specification

TIMD4 / TIM4 / TIM-4 Antibody (Internal) - Product Information

Application	**IHC**
Primary Accession	Q96H15
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**42kDa KDa**

TIMD4 / TIM4 / TIM-4 Antibody (Internal) - 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
16 amino acid peptide from near the center 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 (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

TIMD4 / TIM4 / TIM-4 Antibody (Internal) - 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).

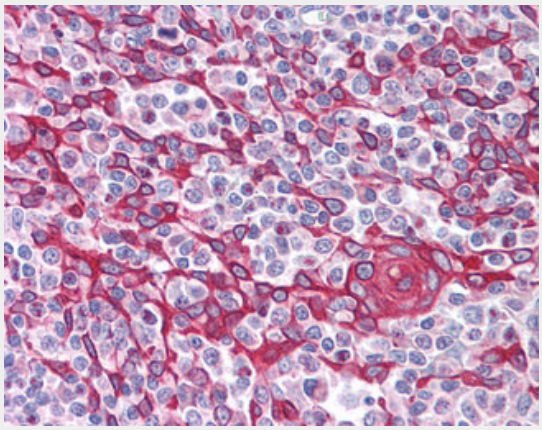
Cellular Location
Cell membrane; Single-pass type I membrane protein. Secreted, extracellular exosome

TIMD4 / TIM4 / TIM-4 Antibody (Internal) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TIMD4 / TIM4 / TIM-4 Antibody (Internal) - Images



Anti-TIMD4 / TIM4 antibody IHC of human thymus.

TIMD4 / TIM4 / TIM-4 Antibody (Internal) - 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 (Internal) - References

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