

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

Rabbit Polyclonal Antibody Catalog # ALS11721

# **Specification**

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

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

Dilution

Q96H15
Human, Mouse
Rabbit
Polyclonal
42kDa KDa
WB~~1:1000
IHC-P~~N/A

WB, IHC-P, ICC

# 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:<a href="http://www.uniprot.org/citations/32703939" target="\_blank">32703939</a>, PubMed:<a href="http://www.uniprot.org/citations/34067457"



target="\_blank">34067457</a>). 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:<a

href="http://www.uniprot.org/citations/32640697" target="\_blank">32640697</a>). Additionally, promotes autophagy process by suppressing NLRP3 inflammasome activity via activation of LKB1/PRKAA1 pathway in a phosphatidylserine-dependent mechanism (By similarity).

## **Cellular Location**

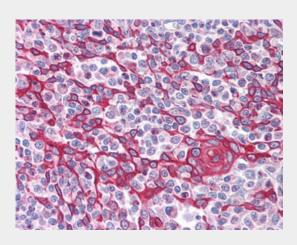
Cell membrane; Single-pass type I membrane protein. Secreted, extracellular exosome

# 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
- <u>Immunohistochemistry</u>
- 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).