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# Anti-KIM1 Antibody

Catalog # ABO12770

## Product Information

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| **Application** | WB |
| **Primary Accession** | Q96D42 |
| **Host** | Rabbit |
| **Reactivity** | Human |
| **Clonality** | Polyclonal |
| **Format** | Lyophilized |
| **Description** | Rabbit IgG polyclonal antibody for Hepatitis A virus cellular receptor 1(HAVCR1) detection. Tested with WB in Human. |
| **Reconstitution** | Add 0.2ml of distilled water will yield a concentration of 500ug/ml. |

## Additional Information

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| **Gene ID** | 26762 |
| **Other Names** | Hepatitis A virus cellular receptor 1, HAVcr-1, Kidney injury molecule 1, KIM-1, T-cell immunoglobulin and mucin domain-containing protein 1, TIMD-1, T-cell immunoglobulin mucin receptor 1, TIM, TIM-1, T-cell membrane protein 1, HAVCR1, KIM1, TIM1, TIMD1 |
| **Calculated MW** | 39250 |
| **Application Details** | Western blot, 0.1-0.5 □g/ml, Human |
| **Subcellular Localization** | Membrane ; Single-pass type I membrane protein . |
| **Tissue Specificity** | Widely expressed, with highest levels in kidney and testis. Expressed by activated CD4+ T-cells during the development of helper T-cells responses. . |
| **Source** | Eukaryota |
| **Protein Name** | Hepatitis A virus cellular receptor 1 |
| **Contents** | Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3. |
| **Immunogen** | A synthetic peptide corresponding to a sequence at the C-terminus of human TIM 1 (321-359aa QQLSVSFSSLQIKALQNAVEKEVQAEDNIYIENSLYATD). |
| **Purification** | Immunogen affinity purified. |
| **Cross Reactivity** | No cross reactivity with other proteins |
| **Storage** | At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also |

be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

## Protein Information

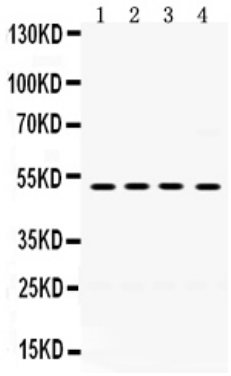
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|---|---|
| **Name** | HAVCR1 |
| **Synonyms** | KIM1, TIM1, TIMD1 |
| **Function** | Phosphatidylserine receptor that plays an important functional role in regulatory B-cell homeostasis including generation, expansion and suppressor functions (PubMed:18082433, PubMed:18414680). Involved in efferocytosis, the process by which apoptotic cells are removed, by binding to phosphatidylserine present on apoptotic cells and promoting their engulfment (PubMed:18082433). Confers phagocytic ability on injured kidney epithelial cells, allowing them to bind to and internalize apoptotic bodies and necrotic debris following kidney injury (PubMed:17471468, PubMed:18414680). The ectodomain binds to the surface of apoptotic kidney epithelial cells via phosphatidylserine and oxidized phospholipids exposed on the cell membrane of the apoptotic cells (PubMed:18414680). HAVCR1-expressing cells are also capable of phagocytosing Gram-negative and Gram-positive bacteria (PubMed:18414680). As P-selectin/SELPLG ligand, plays a specialized role in activated but not naive T-cell trafficking during inflammatory responses (PubMed:24703780). Controls thereby T-cell accumulation in the inflamed central nervous system (CNS) and the induction of autoimmune disease (PubMed:24703780). Acts as a regulator of T-cell proliferation (By similarity). Also regulates expression of various anti-inflammatory cytokines and co-inhibitory ligands including IL10 (By similarity). |
| **Cellular Location** | Cell membrane; Single-pass type I membrane protein. Cell projection, phagocytic cup. Cytoplasmic vesicle, phagosome |
| **Tissue Location** | Widely expressed, with highest levels in kidney and testis. Expressed by activated CD4+ T-cells during the development of helper T-cells responses. |

## Background

KIM1 (KIDNEY INJURY MOLECULE 1), also known as HAVCR1, HAVCR or TIM1, is a protein that in humans is encoded by the KIM1 gene. The KIM1 gene is mapped to 5q33.3. Biochemical, mutational, and cell adhesion analyses confirm that Tim1 is capable of homophilic Tim-Tim interactions. The features identified in murine KIM1 are conserved in human KIM1. The KIM1 protein is indeed a receptor for the virus through the infection of canine osteogenic sarcoma cells expressing HAVCR1 with HAV. Using a monoclonal antibody to mouse Tim1, Tim1 is expressed after activation of naive T cells and on T cells differentiated in Th2-polarizing conditions. Ectopic expression of KIM1 during mouse T-cell differentiation leads to production of the Th2-type cytokine Il4, but not the Th1-type cytokine Ifng. KIM1-expressing epithelial cells internalized apoptotic bodies, and Kim1 is directly responsible for phagocytosis in cultured primary rat tubule epithelial cells and in porcine and canine epithelial cell lines.

## Images

Anti- TIM1 antibody, ABO12770, Western blottingAll lanes: Anti TIM1 (ABO12770) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: PANC Whole Cell Lysate at 40ugLane 3: HEPG2 Whole Cell Lysate at 40ugLane 4: A549 Whole Cell Lysate at 40ugPredicted bind size:




39KDObserved bind size: 49KD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.