

Anti-KIM1 Antibody

Catalog # ABO10946

Product Information

Application	WB, IHC-P, IHC-F
Primary Accession	O54947
Host	Rabbit
Reactivity	Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Hepatitis A virus cellular receptor 1 homolog(HAVCR1) detection. Tested with WB, IHC-P, IHC-F in Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	286934
Other Names	Hepatitis A virus cellular receptor 1 homolog, HAVcr-1, Kidney injury molecule 1, KIM-1, T cell immunoglobulin and mucin domain-containing protein 1, TIMD-1, Havcr1, Kim1
Calculated MW	33964
Application Details	Immunohistochemistry(Frozen Section), 0.5-1 μ g/ml, Rat, - Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Rat, By Heat Western blot, 0.1-0.5 μ g/ml, Rat
Subcellular Localization	Membrane ; Single-pass type I membrane protein .
Tissue Specificity	Expressed at a low level in normal kidney but are increased dramatically in postischemic kidney. Expressed in proliferating bromodeoxyuridine-positive and dedifferentiated vimentin-positive epithelial cells in regenerating proximal tubules. .
Source	Eukaryota
Protein Name	Hepatitis A virus cellular receptor 1 homolog(HAVcr-1)
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg Na ₃ .
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of rat TIM 1(289-307aa HPRAEDNIYIIEDRSRGAE).
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.
Sequence Similarities	Belongs to the immunoglobulin superfamily. TIM family.

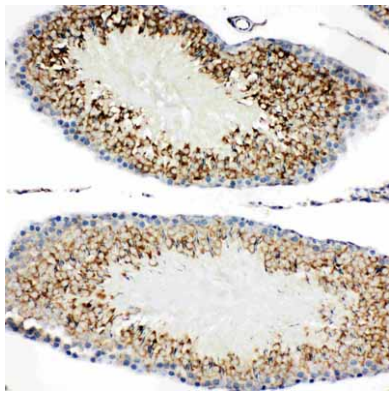
Protein Information

Name	Havcr1
Synonyms	Kim1
Function	Phosphatidylserine receptor that plays an important functional role in regulatory B-cell homeostasis including generation, expansion and suppressor functions (By similarity). Involved in efferocytosis, the process by which apoptotic cells are removed, by binding to phosphatidylserine present on apoptotic cells and promoting their engulfment (By similarity). Confers phagocytic ability on injured kidney epithelial cells, allowing them to bind to and internalize apoptotic bodies and necrotic debris following kidney injury (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 (By similarity). HAVCR1-expressing cells are also capable of phagocytosing Gram-negative and Gram-positive bacteria (By similarity). As P- selectin/SELPLG ligand, plays a specialized role in activated but not naive T-cell trafficking during inflammatory responses (By similarity). Controls thereby T-cell accumulation in the inflamed central nervous system (CNS) and the induction of autoimmune disease (By similarity). Acts as a regulator of T-cell proliferation. Also regulates expression of various anti-inflammatory cytokines and co-inhibitory ligands including IL10 (By similarity).
Cellular Location	Cell membrane {ECO:0000250 UniProtKB:Q96D42}; Single-pass type I membrane protein {ECO:0000250 UniProtKB:Q96D42} Cell projection, phagocytic cup Cytoplasmic vesicle, phagosome {ECO:0000250 UniProtKB:Q96D42}
Tissue Location	Expressed at a low level in normal kidney but are increased dramatically in postischemic kidney. Expressed in proliferating bromodeoxyuridine-positive and dedifferentiated vimentin- positive epithelial cells in regenerating proximal tubules

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 is 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-TIM 1 antibody, ABO10946, IHC(P)IHC(P): Rat Testis Tissue

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