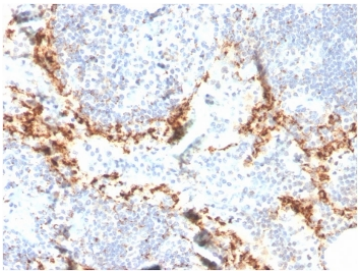
HAVCR2 Antibody TIM3/4024 / Hepatitis A Virus Cellular Receptor 2 Antibody [clone TIM3/4024] (V9430)

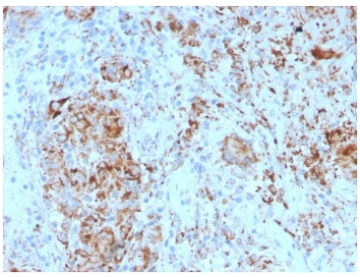
Catalog No.	Formulation	Size
V9430-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9430-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9430SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

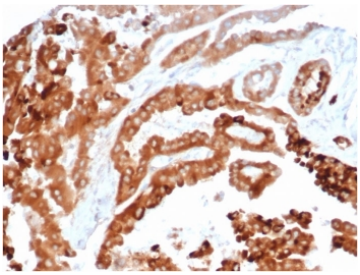
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	TIM3/4024
Purity	Protein A/G affinity
UniProt	Q8TDQ0
Localization	Cell Surface
Applications	Immunohistochemistry (FFPE): 1-2ug/ml Western blot: 2-4ug/ml
Limitations	This HAVCR2 Antibody TIM3/4024 / Hepatitis A Virus Cellular Receptor 2 Antibody is available for research use only.



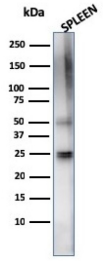
HAVCR2 Antibody TIM3/4024 IHC staining of human lymph node tissue. Immunohistochemical analysis of FFPE human lymph node tissue using Hepatitis A Virus Cellular Receptor 2 Antibody clone TIM3/4024 shows staining of immune cells predominantly surrounding lymphoid follicles. Heat-induced epitope retrieval was performed in 10mM Tris buffer containing 1mM EDTA (pH 9) at boiling temperature for 20 minutes, followed by cooling before staining.



HAVCR2 Antibody TIM3/4024 IHC staining of human lymph node tissue. Immunohistochemical analysis of FFPE human lymph node tissue using Hepatitis A Virus Cellular Receptor 2 Antibody clone TIM3/4024 shows scattered and clustered populations of positively stained immune cells within the lymphoid tissue. Heat-induced epitope retrieval was performed in 10mM Tris buffer containing 1mM EDTA (pH 9) at boiling temperature for 20 minutes, followed by cooling before staining.



HAVCR2 Antibody TIM3/4024 IHC staining of human renal carcinoma tissue. Immunohistochemical analysis of FFPE human renal carcinoma tissue using Hepatitis A Virus Cellular Receptor 2 Antibody clone TIM3/4024 shows cytoplasmic and membrane-associated staining of tumor cells. Heat-induced epitope retrieval was performed in 10mM Tris buffer containing 1mM EDTA (pH 9) at boiling temperature for 20 minutes, followed by cooling before staining.



HAVCR2 Antibody TIM3/4024 WB analysis of human spleen tissue. Western blot analysis of human spleen tissue lysate using Hepatitis A Virus Cellular Receptor 2 Antibody clone TIM3/4024 detects bands at approximately 25 and 50 kDa. HAVCR2 has a calculated molecular weight of approximately 33 kDa, with glycosylation increasing its apparent molecular weight. The identity of the lower molecular weight band has not been confirmed.

Description

HAVCR2 Antibody TIM3/4024 / Hepatitis A Virus Cellular Receptor 2 Antibody targets a cell surface glycoprotein involved in the regulation of immune cell activity, inflammatory signaling and immune tolerance. Encoded by the HAVCR2 gene, the protein is also known as T-cell immunoglobulin and mucin domain-containing protein 3 (TIM-3) and CD366. It belongs to the TIM family of immunoregulatory receptors, which participate in cellular recognition, immune homeostasis and communication between innate and adaptive immune cell populations.

The extracellular region of HAVCR2 contains an immunoglobulin-like variable domain and a mucin-rich stalk that undergoes extensive post-translational glycosylation. Its intracellular domain contains conserved tyrosine residues that participate in the regulation of receptor-associated signaling. HAVCR2 expression is influenced by immune cell differentiation, antigen exposure, inflammatory cytokines and the local tissue environment.

HAVCR2 participates in the recognition of several extracellular ligands, including phosphatidylserine, galectin-9 and HMGB1. Recognition of phosphatidylserine contributes to interactions with apoptotic cells, while interactions with HMGB1 have been implicated in the regulation of nucleic acid-mediated immune responses. In dendritic cells and other myeloid populations, HAVCR2 can influence antigen handling, inflammatory signaling and the subsequent activation of adaptive immune responses.

Genetic alterations affecting HAVCR2 can have significant consequences for immune homeostasis. Germline loss-of-function variants have been associated with subcutaneous panniculitis-like T-cell lymphoma and hemophagocytic lymphohistiocytosis. Certain variants impair protein folding and cell surface localization, disrupting normal receptor function and contributing to excessive inflammatory activity. These findings highlight the importance of HAVCR2 in restraining pathological immune responses.

Within the tumor microenvironment, HAVCR2 expression has been associated with immune cell dysfunction, altered inflammatory signaling and suppression of antitumor immunity. Its expression in tumor-associated immune populations

and certain malignant cells has generated considerable interest in cancer immunology and immune checkpoint-directed therapeutic research. HAVCR2 Antibody TIM3/4024 provides a research tool for investigating receptor expression, lymphoid tissue organization, tumor-associated immune regulation, inflammatory disease mechanisms and the molecular relationships between immune cell activation and tissue homeostasis.

Explore our TIM-3 antibody for additional research into immune checkpoint regulation, T-cell exhaustion and antitumor immune responses.

Application Notes

Optimal dilution of the HAVCR2 Antibody TIM3/4024 / Hepatitis A Virus Cellular Receptor 2 Antibody should be determined by the researcher.

Immunogen

A portion of amino acids 22-202 was used as the immunogen for the HAVCR2 antibody.

Storage

Aliquot the HAVCR2 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

TIM-3 antibody, TIM3 antibody, CD366 antibody, TIMD3 antibody, KIM-3 antibody, Hepatitis A virus cellular receptor 2 antibody, T-cell immunoglobulin and mucin domain-containing protein 3 antibody

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