Datasheet for ABIN3044226

anti-HAVCR1 antibody (C-Term)

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Overview

Quantity:	100 µg
Target:	HAVCR1
Binding Specificity:	AA 332-348, C-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This HAVCR1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunocytochemistry (ICC), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Purpose:	Rabbit IgG polyclonal antibody for Hepatitis A virus cellular receptor 1(HAVCR1) detection. Tested with WB, IHC-P, ICC in Human.
Immunogen:	A synthetic peptide corresponding to a sequence at the C-terminus of human TIM 1(332-348aa IKALQNAVEKEVQAEDN).
Sequence:	IKALQNAVEK EVQAEDN
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for Hepatitis A virus cellular receptor 1(HAVCR1) detection. Tested with WB, IHC-P, ICC in Human. Gene Name: hepatitis A virus cellular receptor 1

Product Details

	Protein Name: Hepatitis A virus cellular receptor 1(HAVcr-1)
Purification:	Immunogen affinity purified.

Target Details

Target:	HAVCR1
Alternative Name:	HAVCR1 (HAVCR1 Products)
Target Type:	Virus
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. Synonyms: HAVCR 1 antibody|HAVcr-1 antibody|HAVCR1 antibody|Hepatitis A virus cellular receptor 1 antibody|Kidney injury molecule 1 antibody|KIM 1 antibody|KIM-1 antibody|T cell immunoglobin domain and mucin domain protein 1 antibody|T-cell immunoglobulin and mucin domain-containing protein 1 antibody|T-cell membrane protein 1 antibody|TIM antibody|TIM-1 antibody|TIM1 antibody|TIMD 1 antibody|TIMD-1 antibody|TIMD1 antibody|TIMD1_HUMAN antibody
UniProt:	Q96D42

Application Details

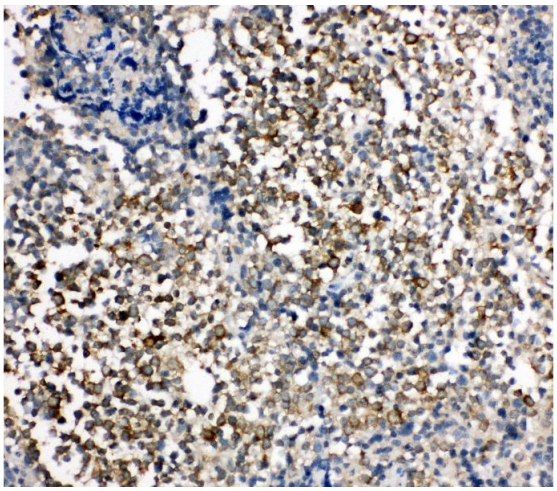
Application Notes:	WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of formalin/paraffin sections. ICC: Concentration: 0.5-1 µg/mL, Tested Species: Human

Application Details

	Notes: Tested Species: Species with positive results. Predicted Species: Species predicted to be fit for the product based on sequence similarities. Other applications have not been tested. Optimal dilutions should be determined by end users.
Comment:	Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P) and ICC.
Restrictions:	For Research Use only

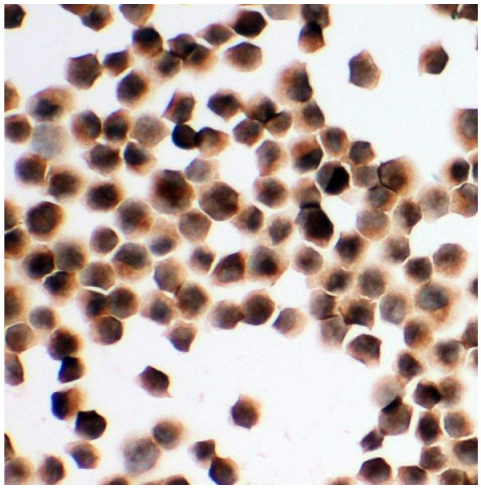
Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Thimerosal, 0.05 mg Sodium azide.
Preservative:	Thimerosal (Merthiolate), Sodium azide
Precaution of Use:	This product contains Sodium azide and Thimerosal (Merthiolate): POISONOUS AND HAZARDOUS SUBSTANCES which should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C/-20 °C
Storage Comment:	At -20°C for one year. After reconstitution, 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.
Expiry Date:	12 months



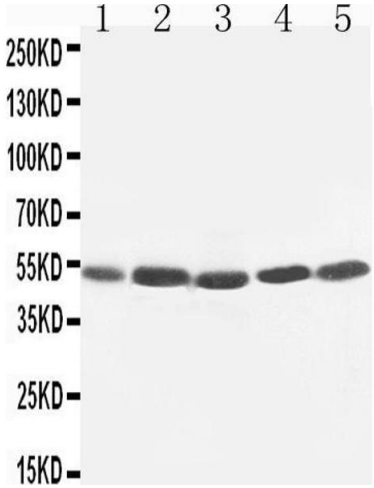
Immunohistochemistry

Image 1. Anti-TIM 1 antibody, IHC(P) IHC(P): Human Tonsil Tissue



Immunohistochemistry

Image 2. Anti-TIM 1 antibody, ICC ICC: K562 Cell



Western Blotting

Image 3. Anti-TIM 1 antibody, Western blotting Lane 1: SMMC Cell Lysate Lane 2: HELA Cell Lysate Lane 3: PANC Cell Lysate Lane 4: M231 Cell Lysate Lane 5: M453 Cell Lysate

Validation report #300028 for Immunohistochemistry (IHC)

Successfully validated (Immunohistochemistry (IHC))

by Human Protein Atlas

Report Number: 300028

Date: Dec 13 2016

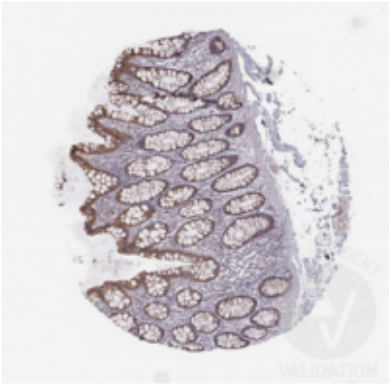
Target:	HAVCR1
Method validated:	Immunohistochemistry (IHC)
Positive Control:	kidney, colon/rectum
Notes:	Passed. ABIN3044226 staining is consistent with RNA-seq data and published literature.
Primary Antibody:	ABIN3044226
Secondary Antibody:	HRP polymer (ThermoFisher Scientific, TL-125-PH)
Protocol:	• Sample preparation: ○ Fixation and TMA preparation according to PMID: 22688270. ○ Cut 4µm TMA sections using a waterfall microtome (ThermoFisher Scientific, HM355S). ○ Dry sections ON at RT and then back them for 12-24h at 50°C. • Deparaffinization and rehydration in xylene and graded alcohol series: ○ xylene twice for 3min. ○ 100% ethanol for 1min. ○ 95% ethanol for 1min. ○ 0.3% H_2O_2 in 95% ethanol for 5min to block endogenous peroxidase. ○ 70% ethanol for 1min. ○ 50% ethanol for 1min. ○ distilled H_2O for 2min. • Antigen Retrieval by Heat Induced Epitope Retrieval (HIER): ○ Boil the sections in Lab Vision Citrate buffer pH6.0 (ThermoFisher Scientific, TA-250-PM1X) for 4min at 125°C in a decloaking chamber (Biocare Medical). ○ Allow slides to cool down to 90°C in the decloaking chamber. • Immunostaining in a Lab Vision Autostainer 480 (ThermorFisher Scientific) at RT with 300µl of reagents for each step: ○ Rinse sections in Lab Vision wash buffer with extra tween added to a final concentration of 0.2% (ThermoFisher Scientific, TA-999-TT and TA-125-TW) wash buffer. ○ Block sections with Lab Vision Ultra V-Block (ThermoFisher Scientific, TA-125-UB) for 5min. ○ Rinse sections 2x in wash buffer. ○ Incubate sections with primary rabbit anti-HAVCR1 antibody (antibodies-online, ABIN3044226) diluted 1:2000 for 30min.

- Rinse sections 3x in wash buffer.
- Incubate sections with labeled HRP polymer (ThermoFisher Scientific, TL-125-PH) for 30min.
- Rinse sections 2x in wash buffer.
- Develop in DAB Quanto solution (ThermoFisher Scientific, TL-125-QHDX) for 5min.
- Rinse sections in distilled H_2O.

- Washing, counterstaining, and coverslipping in Autostainer XL (Leica Biosystems, ST5010) at RT:
  - Counterstaining in Mayer's hematoxylin plus (HistoLab, 01820) for 7.5min.
  - Rinse sections in tap water for 5min.
  - Rinse sections in lithium carbonate water diluted 1:5 for 5min.
  - Dehydration in graded ethanol series and Neo-Clear (Merck Millipore, 109843) according to the manufacturer recommendations.
  - Automated mounting (Leica Biosystems, CV5030) of coverslip with Pertex (Histolab, 00871).
- Microscopy:
  - Image acquisition on a Leica Aperio AT2 and Aperio Scanscope AT at 20x magnification.

Experimental Notes:	Based on published literature, HAVCR1 is widely expressed with highest expected levels in kidney and testis. ABIN3044226 stains kidney and colon/rectum where the protein should be enhanced according to RNA-seq data. Staining in kidney is not distinct but the staining is better in colon/rectum.

Image for Validation report #300028



Validation image no. 1 for anti-Hepatitis A Virus Cellular Receptor 1 (HAVCR1) (AA 332-348), (C-Term) antibody (ABIN3044226)

Staining of human rectum section in a tissue microarray with ABIN3044226. See the protocol for detailed information.