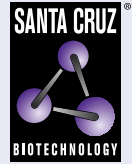


TIM-1 (A-12): sc-518008



The Power to Question

BACKGROUND

CD4⁺ T helper lymphocytes can be divided into types 1 (Th1) and 2 (Th2) on the basis of their cytokine secretion patterns. Th1 cells and their associated cytokines are involved in cell-mediated immunity to intracellular pathogens and delayed-type hypersensitivity reactions. Th2 cells are involved in the control of extracellular helminthic infections and the promotion of atopic and allergic diseases. T cell Ig- and mucin-domain-containing molecules (TIMs) are a family of molecules expressed on T cells. TIM-1 is a single-pass type I membrane protein that is associated with the development of Th2 biased immune responses and selectively expressed on Th2 cells. TIM-1, also designated hepatitis A virus cellular receptor-1 (HAVcr-1) or T cell membrane protein 1, acts as a cell-surface receptor for hepatitis A virus and may also play a role in asthma and allergic disease regulation. TIM-1 is a widely expressed protein with highest levels detected in testis and kidney.

CHROMOSOMAL LOCATION

Genetic locus: HAVCR1 (human) mapping to 5q33.3.

SOURCE

TIM-1 (A-12) is a mouse monoclonal antibody raised against amino acids 203-359 mapping at the C-terminus of TIM-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TIM-1 (A-12) is available conjugated to agarose (sc-518008 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-518008 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-518008 PE), fluorescein (sc-518008 FITC), Alexa Fluor® 488 (sc-518008 AF488), Alexa Fluor® 546 (sc-518008 AF546), Alexa Fluor® 594 (sc-518008 AF594) or Alexa Fluor® 647 (sc-518008 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-518008 AF680) or Alexa Fluor® 790 (sc-518008 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

TIM-1 (A-12) is recommended for detection of TIM-1 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TIM-1 siRNA (h): sc-61691, TIM-1 shRNA Plasmid (h): sc-61691-SH and TIM-1 shRNA (h) Lentiviral Particles: sc-61691-V.

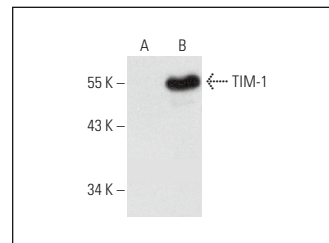
Molecular Weight of TIM-1: 68 kDa.

Positive Controls: human TIM-1 transfected HEK293T whole cell lysate.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



TIM-1 (A-12): sc-518008. Western blot analysis of TIM-1 expression in non-transfected (A) and human TIM-1 transfected (B) HEK293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Gezginci-Oktayoglu, S., et al. 2018. 4-Methylcatechol prevents streptozotocin-induced acute kidney injury through modulating NGF/TrkA and ROS-related Akt/GSK3β/β-catenin pathways. *Int. Immunopharmacol.* 64: 52-59.
- Sanajou, D., et al. 2018. Reduction of renal tubular injury with a RAGE inhibitor FPS-ZM1, valsartan and their combination in streptozotocin-induced diabetes in the rat. *Eur. J. Pharmacol.* 842: 40-48.
- Nazari Soltan Ahmad, S., et al. 2019. Tangeretin protects renal tubular epithelial cells against experimental cisplatin toxicity. *Iran. J. Basic Med. Sci.* 22: 179-186.
- Dissanayake, L.V., et al. 2022. Lack of xanthine dehydrogenase leads to a remarkable renal decline in a novel hypouricemic rat model. *iScience* 25: 104887.
- Kravtsova, O., et al. 2022. SGLT2 inhibition effect on salt-induced hypertension, RAAS, and Na⁺ transport in Dahl SS rats. *Am. J. Physiol. Renal Physiol.* 322: F692-F707.
- Zhu, M., et al. 2023. AMPK activation coupling SENP1-Sirt3 axis protects against acute kidney injury. *Mol. Ther.* 31: 3052-3066.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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