

PRODUCT INFORMATION



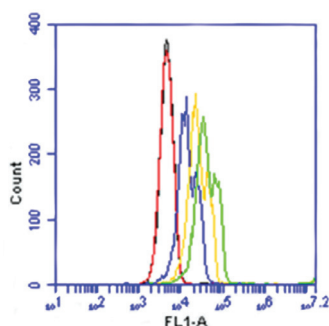
TIM4 Monoclonal Antibody

Item No. 10322

Overview and Properties

Contents:	This vial contains 400 µg of protein A-purified monoclonal antibody.
Synonyms:	T Cell Immunoglobulin and Mucin domain-containing protein 4, T Cell Membrane Protein 4
Immunogen:	TIM4 from mouse peritoneal cells
Species Reactivity:	(+) Human; other species not tested
Uniprot No.:	Q96H15
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS, pH 7.2, with 50% glycerol and 0.02% sodium azide
Host:	Armenian hamster
Applications:	Flow cytometry (FC) and immunocytochemistry (ICC); The optimal working concentration/dilution should be determined empirically.

Image



Black: Blank
Red: Normal Rabbit IgG-FITC (0.01 µg/ml)
Blue: TIM4 Monoclonal Antibody (1 µg/ml)
Yellow: TIM4 Monoclonal Antibody (5 µg/ml)
Green: TIM4 Monoclonal Antibody (10 µg/ml)

Jurkat cells were fixed with cytospin, blocked with 5% normal goat serum, and washed between steps.
2°Ab used = Goat anti-hamster-FITC: 1:750.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

T cell immunoglobulin and mucin domain-containing molecule (TIM4) is a type I transmembrane protein from the TIM gene family that plays a vital role in regulating immune responses, including those in allergy, asthma, transplant tolerance, autoimmunity, and viral infections.¹ TIM4 is expressed on dendritic cells and macrophages, and these proteins bind tightly to phosphatidylserine on apoptotic cells and enhance their engulfment by macrophages.² It also plays an important role in the proliferation of T helper type 2 cells.³ TIM4 is the natural ligand of TIM1, and this binding regulates T cell proliferation.⁴ TIM4 expressing cells also regulate adaptive immunity.⁵

References

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3. Cai, P.C., Hu, L.H., Cui, T.P., *et al.* Association of TIM4 promoter polymorphism -1419G>A with childhood asthma in a Chinese Han population. *Tissue Antigens* **74**, 11-16 (2009).
4. Meyers, J.H., Chakravarti, S., Schlesinger, D., *et al.* TIM-4 is the ligand for TIM-1, and the TIM-1-TIM-4 interaction regulates T cell proliferation. *Nat. Immunol.* **6**, 455-464 (2005).
5. Albacker, L.A., Karisola, P., Chang, Y.-J., *et al.* TIM-4, a receptor for phosphatidylserine, controls adaptive immunity by regulating the removal of antigen-specific T cells. *J. Immunol.* **185**, 6839-6849 (2010).

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