

## PerCP/Cyanine5.5 anti-mouse Tim-4 Antibody

<b>Catalog# / Size</b>	130019 / 25 µg 130020 / 100 µg
<b>Clone</b>	RMT4-54
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	T cell immunoglobulin and mucin domain containing protein-4
<b>Isotype</b>	Rat IgG2a, κ
<b>Description</b>	Tim-4 is a transmembrane protein known as T cell immunoglobulin and mucin domain containing protein-4. It is expressed on antigen-presenting cells and not on T cells. Tim-4 binds to Tim-1 to promote T cell proliferation by enhancing cell division and reducing apoptosis. Tim-4 bind to phosphatidylserine through its FG-CC' binding cleft in the N-terminal IgV domain to facilitate the clearance of apoptotic cells or bodies.

### Product Details

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<b>Verified Reactivity</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Rat
<b>Immunogen</b>	Mouse TIM4-Ig fusion protein
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with PerCP/Cyanine5.5 under optimal conditions.
<b>Concentration</b>	0.2 mg/mL
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze</b> .
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is ≤ 0.25 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application.  * PerCP/Cyanine5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.
<b>Excitation Laser</b>	Blue Laser (488 nm)
<b>Application Notes</b>	Additional reported applications (for the relevant formats of this clone) include: <i>in vivo</i> induction of auto-antibody production <sup>1</sup> and blockade of dendritic cell Tim-4 <sup>2</sup> .
<b>Application References</b>	1. Nakayama M, <i>et al.</i> 2009. <i>Blood</i> . 113:3821. (FA)
<b>(PubMed link indicates BioLegend citation)</b>	2. Yeung MY, <i>et al.</i> 2013. <i>J. Immunol.</i> 191:4447. (Block)
<b>RRID</b>	AB_2876458 (BioLegend Cat. No. 130019) AB_2876458 (BioLegend Cat. No. 130020)

### Antigen Details

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<b>Structure</b>	Transmembrane protein containing immunoglobulin domain and mucin-like domain
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<b>Distribution</b>	Unlike the other Tims, Tim-4 is only expressed by antigen-presenting cells, but not by T cells.
<b>Function</b>	Tim-4 is expressed on antigen-presenting cells. It provides co-stimulation to promote T cell proliferation and survival and has a possible role in clearance of apoptotic cells by binding phosphatidylserine.
<b>Interaction</b>	Phosphatidylserine is the ligand of Tim-4 and Tim-4 is a ligand of Tim-1.
<b>Ligand/Receptor</b>	Phosphatidylserine, TIM1
<b>Cell Type</b>	Antigen-presenting cells
<b>Biology Area</b>	Immunology
<b>Antigen References</b>	<ol style="list-style-type: none"> <li>1. Kuchroo VK, <i>et al.</i> 2008. <i>Nat. Rev. Immunol.</i> 8:577</li> <li>2. Miyanishi M, <i>et al.</i> 2007. <i>Nature</i> 450:435</li> <li>3. Rodriguez-Manzanet R, <i>et al.</i> 2008. <i>J. Immunol.</i> 180:4706</li> </ol>
<b>Gene ID</b>	<a href="#">276891</a>

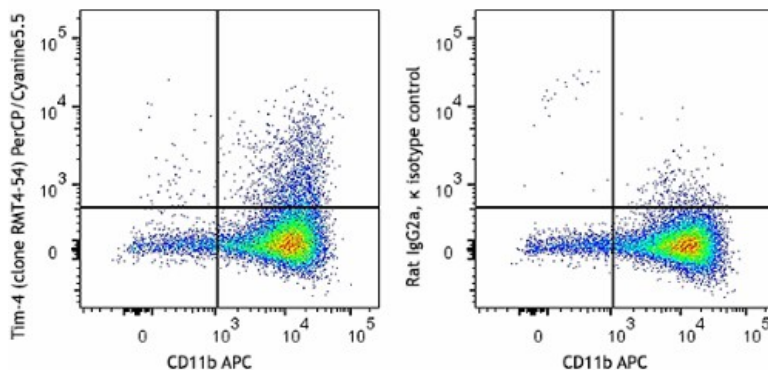
## Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

Purified anti-mouse Tim-4, PE anti-mouse Tim-4, Alexa Fluor® 647 anti-mouse Tim-4, PE/Cyanine7 anti-mouse Tim-4, TotalSeq™-A0567 anti-mouse Tim-4, Ultra-LEAF™ Purified anti-mouse Tim-4, PerCP/Cyanine5.5 anti-mouse Tim-4, TotalSeq™-C0567 anti-mouse Tim-4, TotalSeq™-B0567 anti-mouse Tim-4, APC anti-mouse Tim-4

## Product Data



Thioglycolate-elicited Balb/c mouse peritoneal macrophages were stained with CD11b APC and anti-mouse Tim-4 (clone RMT4-54) PerCP/Cyanine5.5 (left) or rat IgG2a, κ isotype control PerCP/Cyanine5.5 (right).

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