SONY

# Product Data Sheet

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

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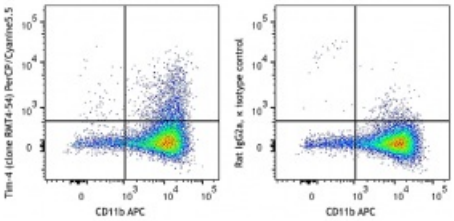
| **Catalog # / Size:** | 1250100 / 100 µg<br>1250095 / 25 µg |
| **Clone:** | RMT4-54 |
| **Isotype:** | Rat IgG2a, κ |
| **Immunogen:** | Mouse TIM4-Ig fusion protein |
| **Reactivity:** | Mouse |
| **Preparation:** | The antibody was purified by affinity chromatography and conjugated with PerCP/Cyanine5.5 under optimal conditions. |
| **Formulation:** | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide |
| **Workshop Number:** | V-CD28.05 |
| **Concentration:** | 0.2 mg/mL |




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).

## Applications:

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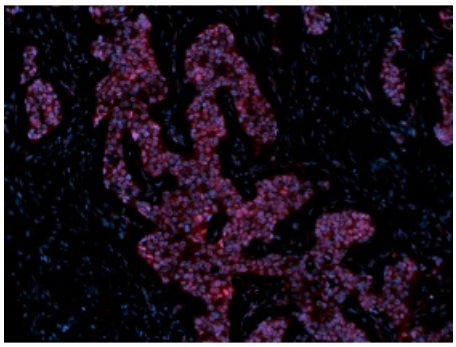
| **Applications:** | Flow Cytometry |
| **Recommended Usage:** | Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤ 0.25 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application.<br><br>* PerCP/Cyanine5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm. |
| **Application Notes:** | Additional reported applications (for the relevant formats of this clone) include: *in vivo* induction of auto-antibody production[1] and blockade of dendritic cell Tim-4[2]. |



Formalin-fixed paraffin-embedded human breast cancer tissue slices were deparaffinized and rehydrated. Antigen retrieval was done with Tris-Buffered Saline 1X (1.0 M, pH 7.4) at 95°C for 40 minutes, washed with PBS/0.05% Tween 20 twice for five minutes, permeabilized with 0.5% Triton X-100 for ten minutes, and blocked with 5% FBS and 0.2% gelatin for 30 minutes. Then, the slices were stained with 5 µg/mL anti-EGFR (clone A19002A) Alexa Fluor® 647 (red) at 4°C overnight. Nuclei were counterstained with DAPI (green). The image was captured with a 10X objective.

**Application References:**
1. Nakayama M, *et al*. 2009. *Blood*. 113:3821. (FA)
2. Yeung MY, *et al*. 2013. *J. Immunol*. 191:4447. (Block)

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**Description:** 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.

**Antigen References:**
1. Kuchroo VK, *et al.* 2008. *Nat. Rev. Immunol.* 8:577
2. Miyanishi M, *et al.* 2007. *Nature* 450:435
3. Rodriguez-Manzanet R, *et al.* 2008. *J. Immunol.* 180:4706