SONY

Product Data Sheet

Purified anti-rat CD172a (SIRPα)

Catalog # / Size: 1623510 / 500 µg

Clone: OX-41

Isotype: Mouse IgG2a, κ

Immunogen: Rat peritoneal macrophages

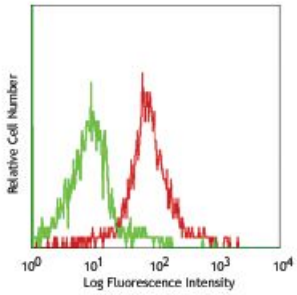
Reactivity: Rat

Preparation: The antibody was purified by affinity chromatography.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Workshop Number: V-CD28.05

Concentration: 0.5



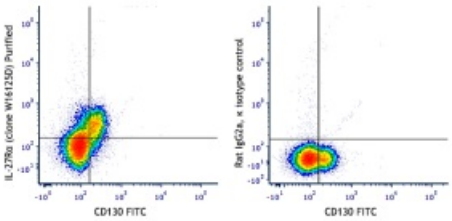
LOU rat bone marrow cells stained with purified OX-41 (gated on granulocyte population)

Applications:

Applications: Flow Cytometry, Immunohistochemistry, Other, Immunoprecipitation

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 10^6 cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Additional reported applications (for the relevant formats) include: Western blotting3, immunoprecipitation1, and immunohistochemical staining[1, 2].



C57BL/6 mouse frozen intestine section was fixed with 4% paraformaldehyde (PFA) for 10 minutes at room temperature and blocked with 5% FBS for 30 minutes at room temperature. Then the section was stained with 10 µg/mL of anti-mouse CD45 (clone S18009D) Alexa Fluor® 647 (red) and anti-mouse/human CD324 (clone DECMA-1) Alexa Fluor® 594 (green) overnight at 4°C. Nuclei were counterstained with DAPI (blue). The image was captured by 10X objective.

Application References:

1. Robinson AP, *et al.* 1986. *Immunology* 57:239. (IP, IHC)
2. Thai QA, *et al.* 1999. *Stroke* 30:140. (IHC)
3. Adams S, *et al.* 1998. *J. Immunol.* 161:1853. (WB)

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Description: Rat CD172a, also known as a signal-regulatory protein α (SIRPα), is a 75-110 kD transmembrane glycoprotein involved in the receptor tyrosine kinase coupled signaling pathway. It belongs to the Ig superfamily primarily expressed on monocytes/macrophages, granulocytes, dendritic cells and neurons. CD172a serves as a substrate of activated receptor ttyrosine kinases (RTKs). The interaction of the CD172a intracellular domain with SHP-1 and SHP-2 displays negative signaling in the regulation of leukocyte adhesion and transmigration, T cell activation, macrophage fusion and phagocytosis. CD47 (IAP) is an extracellular ligand for CD172a.

Antigen References:

1. Robinson AP, *et al.* 1986. *Immunology* 57:239.
2. Thai QA, *et al.* 1999. *Stroke* 30:140.
3. Adams S, *et al.* 1998. *J. Immunol.* 161:1853.

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