

# Product Data Sheet

## Purified anti-human CD172a/b (SIRP $\alpha/\beta$ )

**Catalog # / Size:** 337302 / 100  $\mu$ g

**Clone:** 148

**Isotype:** Mouse IgG1,  $\kappa$

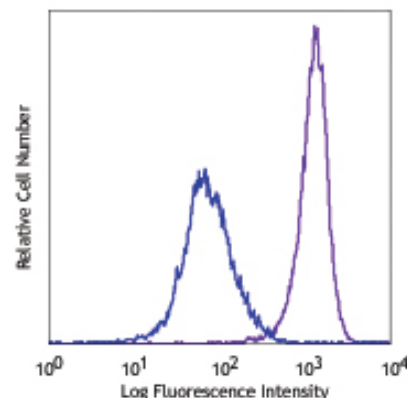
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography.

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

**Concentration:** 0.5 mg/ml

**Storage:** The antibody solution should be stored undiluted at 4°C.



Human peripheral blood granulocytes stained with purified 148, followed by anti-mouse IgG biotin and Sav-PE

## Applications:

**Applications:** FC - *Quality tested*  
 IP, WB - *Reported in the literature*

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is  $\leq 0.125$   $\mu$ g per million cells in 100  $\mu$ l volume. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** Additional reported applications include: mAb 148 is specific for CD172a/b, and also stains CD172g transfected cells, but not T-lymphocytes

**Application References:** 1. Piccio L, *et al.* 2005. *Blood* 105:2421  
 2. Dietrich J, *et al.* 2000. *J. Immunol.* 164:9

**Description:** SIRPs (signal-regulatory proteins) are a family of transmembrane glycoproteins that belong to Ig superfamily. SIRPa (CD172a, SIRPb), (SIRPb1, CD172b), and SIRPg (SIRPb2, CD172g) have been described. CD172a/b molecules are expressed on myeloid cells and neurons. CD172a serves as a substrate of activated receptor tyrosine kinases (RTKs). The interaction of CD172a intracellular domain with SHP-1 and SHP-2 displays negative signaling in the regulation of leukocyte adhesion and transmigration. CD47 (IAP) is an extracellular ligand for CD172a. CD172b is a disulfide-linked homodimer. CD172b has been shown to regulate neutrophil transepithelial migration through the interaction with DAP12 and Syk kinase (through TYROBP).

**Antigen References:** 1. Kharitonov A, *et al.* 1997. *Nature* 386:181.  
 2. Tomasello E, *et al.* 2000. *Eur. J. Immunol.* 30:2147.  
 3. Seiffert M, *et al.* 2001. *Blood* 97:2741.  
 4. Timms JF, *et al.* 1998. *Mol. Cell Biol.* 18:3838.  
 5. Barclay AN and MH. Brown. 2006. *Nat. Rev. Immunol.* 6:457

### Related Products:

**Product**  
 Purified Mouse IgG1,  $\kappa$  Isotype Ctrl  
 Cell Staining Buffer  
 RBC Lysis Buffer (10X)

**Clone**  
 MG1-45

### Application

FC, ICC, ICFC, IF, IHC, IP, WB  
 FC, ICC, ICFC  
 FC, ICFC



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