

Product Data Sheet

LEAF™ Purified anti-mouse CD47

Catalog # / Size: 127511 / 50 µg
127512 / 500 µg

Clone: miap301

Isotype: Rat IgG2a, κ

Reactivity: Mouse, **Cross-Reactivity:** Not cross-reactive with human CD47

Preparation: The LEAF™ (Low Endotoxin, Azide-Free) antibody was purified by affinity chromatography.

Formulation: 0.2 µm filtered in phosphate-buffered solution, pH 7.2, containing no preservative. Endotoxin level is <0.1 EU/µg of the protein (<0.01 ng/µg of the protein) as determined by the LAL test.

Concentration: 1.0 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C. This LEAF™ solution contains no preservative; handle under aseptic conditions.

Applications:

Applications: FC - *Quality tested*
Block- *This application has been 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 ≤1.0 µg per million cells in 100 µl volume or 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Application References:

1. Wang H, *et al.* 2007. *P. Natl. Acad. Sci. USA* 104:13744.
2. Jiang P, *et al.* 1999. *J. Biol. Chem.* 274:559.
3. Chang HP, *et al.* 2001. *Neuroscience.* 102:289.
4. Azcutia V, *et al.* 2012. *J. Immunol.* 189:2553. PubMed.

Description: CD47, also known as Integrin-Associated Protein (IAP), is a membrane protein of about 50 kd with an IgV-like extracellular domain, a five membrane-spanning segment and a short terminal cytoplasmic region. It is widely expressed on many cell types and often associated with beta 3 integrins. The significance of this molecule is recently drawing increasing attention. It has been reported that CD47 functions as a self marker. Red cells lacking CD47 were rapidly cleared from the bloodstream by splenic macrophages. By binding to SIRPα, CD47 controls hemostatic innate immune functions, such as phagocytosis and cell trafficking.

Antigen References:

1. Brown E, *et al.* 1990. *J. Cell Biol.* 111:2785
2. Mawby WJ, *et al.* 1994. *Biochem. J.* 304:525
3. Gao AG, *et al.* 1996. *J. Biol. Chem.* 271:21
4. Oldenburg PA, *et al.* 2000. 288:2051.
5. van Beck EM, *et al.* 2005. *J. Immunol.* 175:7781

Related Products:

Product
LEAF™ Purified Rat IgG2a, κ Isotype Ctrl

Cell Staining Buffer
RBC Lysis Buffer (10X)

Clone
RTK2758

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



For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.



*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biollegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.