SONY

Product Data Sheet

PE anti-mouse CD107a (LAMP-1)

Catalog # / Size: 1208055 / 50 µg
1208060 / 200 µg

Clone: 1D4B

Isotype: Rat IgG2a, κ

Immunogen: This monoclonal antibody was raised against NIH/3T3 mouse embryonic fibroblast tissue culture cell membranes. It has been mapped to the N-terminus of LAMP-1.

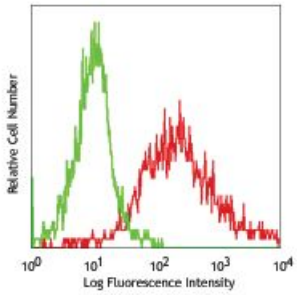
Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography, and conjugated with PE under optimal conditions.

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

Workshop Number: 750 under optimal conditions.

Concentration: 0.2



Thioglycollate-elicited BALB/c mouse peritoneal macrophages stained with 1D4B PE

Applications:

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.

Application Notes: This antibody is effective in immunoblotting (WB) and immunohistochemistry (IHC).

* Expected MW: 120 kD
WB Positive Control: Mouse 3T3 cell lysate and Mouse Spleen
IHC Positive Control: Mouse Pancreas, Colon, Kidney

Description: CD107a, also known as Lysosome-Associated Membrane Protein 1 (LAMP-1) or LGP-120, is a 110-140 kD type I membrane glycoprotein. Mature CD107a is heavily glycosylated from a 40 kD core protein. This molecule is located on the luminal side of lysosomes. Upon activation, CD107a is transferred to the cell membrane surface of activated platelets, activated lymphocytes, macrophages, epithelial cells, endothelial cells, and some tumor cells. CD107a has been suggested to play a role in the protection of lysosomal membrane from lysosomal hydrolases which is involved in cell adhesion and regulation of tumor metastasis, and mediates autoimmune disease progression. CD107a is a ligand for galaptin and E-selectin. Surface expression of LAMP-1 has been shown to correlate with $CD8^+$ T cell and NK cell cytotoxicity.

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Antigen References:

1. Lechmann M, *et al.* 2005. *Biochem. Biophys. Res. Commun.* 329:132.
2. Kotxor N, *et al.* 2004. *Immunobiology* 209:129.
3. Leon F, *et al.* 2004. *J. Immunol.* 173:2995.
4. Cramer SO, *et al.* 2000. *Int. Immunol.* 12:1347.
5. Fujimoto Y, *et al.* 2002. *Cell* 108:755.

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