

TECHNICAL DATA SHEET

CyFlow™ CD107b Azide Free Anti-Hu; Clone H4B4

REF BX184646

**For Research Use Only.
Not for use in diagnostic or therapeutic procedures.**

Specifications

Antigen	CD107b
Alternative Names	LAMP-2
Clone	H4B4
Clonality	monoclonal
Format	Azide Free
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	Mouse Rat
Quantity [Concentration]	0.1 mg [1 mg/ml]
Immunogen	Human peripheral blood mononuclear cells (PBMC)

Specificity

The mouse monoclonal antibody H4B4 recognizes CD107b antigen, an extensively glycosylated 100-120 kDa widely expressed lysosome-associated protein.

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Application

Based on published sources, this antibody is suitable for the following applications:

- Flow cytometry
- Western blot
- Immunohistochemistry
- Immunocytochemistry

Storage Buffer

The reagent is provided in azide-free phosphate buffered saline (PBS) solution, pH ≈7.4; 0.2 µm filter sterilized.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

CD107b (LAMP-2; lysosome-associated membrane protein-2), together with CD107a (LAMP-1), is a major constituent of lysosomal membrane. The LAMP proteins are involved in lysosome biogenesis and are required for fusion of lysosomes with phagosomes, especially CD107b is important regulator in successful phagosomal maturation. CD107b deficiency causes an accumulation of autophagosomes in many tissues leading to cardiomyopathy and myopathy (Danons disease). Immature CD107b is an approximately 45 kDa protein, but after extensive glycosylation the mature glycoprotein has about 100-120 kDa.

References

- Denzer K, van Eijk M, Kleijmeer MJ, Jakobson E, de Groot C, Geuze HJ: Follicular dendritic cells carry MHC class II-expressing microvesicles at their surface. J Immunol. 2000 Aug 1; 165(3):1259-65. < PMID: 10903724 >
- Palmer DR, Fernandez S, Bisbing J, Peachman KK, Rao M, Barvir D, Gunther V, Burgess T, Kohno Y, Padmanabhan R, Sun W: Restricted replication and lysosomal trafficking of yellow fever 17D vaccine virus in human dendritic cells. J Gen Virol. 2007 Jan; 88(1):148-56. < PMID: 17170447 >
- Borgne-Sanchez A, Dupont S, Langonné A, Baux L, Lecoœur H, Chauvier D, Lassalle M, Déas O, Brière JJ, Brabant M, Roux P, Péchoux C, Briand JP, Hoebeke J, Deniaud A, Brenner C, Rustin P,

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- Edelman L, Rebouillat D, Jacotot E: Targeted Vpr-derived peptides reach mitochondria to induce apoptosis of alphaVbeta3-expressing endothelial cells. *Cell Death Differ.* 2007 Mar; 14(3):422-35. < PMID: 16888644 >
- Kannanganat S, Ibegbu C, Chennareddi L, Robinson HL, Amara RR: Multiple-cytokine-producing antiviral CD4 T cells are functionally superior to single-cytokine-producing cells. *J Virol.* 2007 Aug; 81(16):8468-76. < PMID: 17553885 >
 - Guia S, Cognet C, de Beaucoudrey L, Tessmer MS, Jouanguy E, Berger C, Filipe-Santos O, Feinberg J, Camcioglu Y, Levy J, Al Jumaah S, Al-Hajjar S, Stephan JL, Fieschi C, Abel L, Brossay L, Casanova JL, Vivier E: A role for interleukin-12/23 in the maturation of human natural killer and CD56+ T cells in vivo. *Blood.* 2008 May 15; 111(10):5008-16. < PMID: 18319400 >
 - Apte SH, Baz A, Groves P, Kelso A, Kienzle N: Interferon-gamma and interleukin-4 reciprocally regulate CD8 expression in CD8+ T cells. *Proc Natl Acad Sci USA.* 2008 Nov 11; 105(45):17475-80. < PMID: 18988742 >
 - Thedrez A, Harly C, Morice A, Salot S, Bonneville M, Scotet E: IL-21-mediated potentiation of antitumor cytolytic and proinflammatory responses of human V gamma 9V delta 2 T cells for adoptive immunotherapy. *J Immunol.* 2009 Mar 15; 182(6):3423-31. < PMID: 19265120 >
 - Meade JL, Wilson EB, Holmes TD, de Wynter EA, Brett P, Straszynski L, Ballard PA, Trapani JA, McDermott MF, Cook GP: Proteolytic activation of the cytotoxic phenotype during human NK cell development. *J Immunol.* 2009 Jul 15; 183(2):803-13. < PMID: 19570824 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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