

TECHNICAL DATA SHEET

CyFlow™ CD107a Alexa Fluor™ 488 **Anti-Hu/Ms; Clone H4A3**

REF CG942258

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD107a
Alternative Names	LAMP-1
Clone	H4A3
Clonality	monoclonal
Format	Alexa Fluor™ 488
Host / Isotype	Mouse / IgG1
Species Reactivity	Human Mouse, Non-Human Primates
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	Human peripheral blood mononuclear cells (PBMC)

Specificity

The mouse monoclonal antibody H4A3 recognizes CD107a antigen, a 100-120 kDa glycoprotein expressed mainly on lysosomal, but also on the plasma membrane.

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Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 4 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.02% (w/v) sodium azide.

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

CD107a (LAMP-1; lysosome-associated membrane protein-1), together with CD107b (LAMP-2), is a major constituent of lysosomal membrane, 1-2 % of total CD107a is found also on the plasma membrane. The LAMP proteins are involved in lysosome biogenesis and are required for fusion of lysosomes with phagosomes. Increased CD107a immunoreactivity is observed in neurones, and in glial cells surrounding senile plaques in Alzheimers disease cases and is localized mainly in medullary epithelial cells, single macrophages and lymphocytes in acute thymic involution. CD107a is a good marker of mast cell activation.

References

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- Mao H, Tu W, Liu Y, Qin G, Zheng J, Chan PL, Lam KT, Peiris JS, Lau YL: Inhibition of human natural killer cell activity by influenza virions and hemagglutinin. *J Virol*. 2010 May; 84(9):4148-57. < PMID: 20164232 >

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

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