

## TECHNICAL DATA SHEET

### CyFlow™ CD107b Alexa Fluor™ 488 Anti-Hu; Clone H4B4

**REF** AK666495

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

### Specifications

|                                    |                                                 |
|------------------------------------|-------------------------------------------------|
| <b>Antigen</b>                     | CD107b                                          |
| <b>Alternative Names</b>           | LAMP-2                                          |
| <b>Clone</b>                       | H4B4                                            |
| <b>Clonality</b>                   | monoclonal                                      |
| <b>Format</b>                      | Alexa Fluor™ 488                                |
| <b>Host / Isotype</b>              | Mouse / IgG1                                    |
| <b>Species Reactivity</b>          | Human                                           |
| <b>Negative Species Reactivity</b> | Mouse   Rat                                     |
| <b>Quantity</b>                    | 100 tests                                       |
| <b>Immunogen</b>                   | 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

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 4 µl reagent / 100 µl of whole blood or 10<sup>6</sup> 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

|                  |                                                                               |
|------------------|-------------------------------------------------------------------------------|
| <b>Storage</b>   | Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze. |
| <b>Stability</b> | 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

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The Safety Data Sheet for this product is available at [www.sysmex-partec.com/services](http://www.sysmex-partec.com/services).

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