



1P-521-T025

Monoclonal Antibody to CD107a Phycoerythrin (PE) conjugated (25 tests)

Clone:	B-T47
Isotype:	Mouse IgG1
Specificity:	The antibody B-T47 recognizes CD107a, a 100-120 kDa glycoprotein expressed mainly on lysosomal, but also on the plasma membrane.
Immunogen:	U937 human Caucasian histiocytic lymphoma cell line
Species Reactivity:	Human
Preparation:	The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Storage Buffer:	The reagent is provided in phosphate buffered saline (PBS) containing 15 mM sodium azide and 0.2% (w/v) high-grade protease free Bovine Serum Albumin (BSA) as a stabilizing agent.
Storage / Stability:	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label. Short-term exposure to room temperature should not affect the quality of the reagent. However, if reagent is stored under any conditions other than those specified, the conditions must be verified by the user.
Usage:	The reagent is designed for Flow Cytometry analysis of human blood cells using 20 µl reagent / 100 µl of whole blood or 10 ⁶ cells in a suspension. The content of a vial (0.5 ml) is sufficient for 25 tests.
Expiration:	See vial label
Lot Number:	See vial label
Background:	CD107a (lysosome-associated membrane protein-1, LAMP-1), together with 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:	*Grützka A, Smorodchenko A, Lippert U, Kirchof L, Artuc M, Henz BM: LAMP-1 and LAMP-2, but not LAMP-3, are reliable markers for activation-induced secretion of human mast cells. <i>Cytometry A</i> . 2004 Sep;61(1):62-8. *Barrachina M, Maes T, Buesa C, Ferrer I.: Lysosome-associated membrane protein 1 (LAMP-1) in Alzheimer's disease. <i>Neuropathol Appl Neurobiol</i> . 2006 Oct;32(5):505-16. *Sarafian VS, Marinova T.T.: Lysosomal membrane-associated glycoproteins are differentially expressed in acute and chronic human thymic involution. <i>Acta Biol Hung</i> . 2006 Sep;57(3):315-22. *Eskelinen E.L.: Roles of LAMP-1 and LAMP-2 in lysosome biogenesis and autophagy. <i>Mol Aspects Med</i> . 2006 Oct-Dec;27(5-6):495-502. *Huynh KK, Eskelinen EL, Scott CC, Malevanets A, Saftig P, Grinstein S.: LAMP proteins are required for fusion of lysosomes with phagosomes. <i>EMBO J</i> . 2007 Jan 24;26(2):313-24.

For laboratory research only, not for drug, diagnostic or other use.