

anti-human CD107a

Monoclonal antibody H4A3 to human CD107a

Cat-No: 21271071

100 µg in 100 µl

Clone: H4A3

Specificity: The mouse monoclonal antibody H4A3 recognizes CD107a, an approximately 100-120 kDa glycoprotein expressed mainly on lysosomal, but also on the plasma membrane.

Isotype subclass: Mouse IgG1

Form: Purified by protein A-affinity chromatography

Purity: > 95% (by SDS-PAGE)

Physical state: liquid

Buffer/Additives/Preservative: PBS containing 0.09 % sodium azide (pH 7.2).

Expiration date: The reagent is stable until the expiry date stated on the vial label.

Storage conditions: Store at 2 ° - 8 °C. Do not freeze

Application: Flow Cytometry, Immunohistochemistry (f/p), Immunocytochemistry, Western Blotting

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:

- *) Tomescu C, Chehimi J, Maino VC, Montaner LJ: NK cell lysis of HIV-1-infected autologous CD4 primary T cells: requirement for IFN-mediated NK activation by plasmacytoid dendritic cells. *J Immunol.* 2007 Aug 15;179(4):2097-104.
- *) Yu CI, Gallegos M, Marches F, Zurawski G, Ramilo O, García-Sastre A, Banchereau J, Palucka AK: Broad influenza-specific CD8+ T-cell responses in humanized mice vaccinated with influenza virus vaccines. *Blood.* 2008 Nov 1;112(9):3671-8.
- *) 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.
- *) Majer F, Vlaskova H, Krol L, Kalina T, Kubanek M, Stolnaya L, Dvorakova L, Elleder M, Sikora J: Danon disease: a focus on processing of the novel LAMP2 mutation and comments on the beneficial use of peripheral white blood cells in the diagnosis of LAMP2 deficiency. *Gene.* 2012 May 1;498(2):183-95.

Warning: Sodium azide is harmful if swallowed (R22). Keep out of reach of children (S2). Keep away from food, drink and animal feeding stuff (S13). Wear suitable protective clothing (S36). If swallowed, seek medical advice immediately and show this container or label (S46). Contact with acids liberates very toxic gas (R32). Azide compounds should be flushed with large volumes of water during disposal to avoid deposits in lead or copper plumbing where explosive conditions can develop.

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