

anti-human CD18 FITC

FITC - conjugated monoclonal antibody HI18a to human CD18

Cat-No: **21810183**

500 µl

Clone: HI18a

Specificity: The antibody HI18a recognizes a 95kDA transmembrane protein, integrin β 2 subunit, which associates respectively with the integrin α subunits: CD11a, CD11b, CD11c and CD11d forming four heterodimers names CD11a/CD18 (LFA-1), CD11b/CD18 (Mac-1), CD11c/CD18 (p150,95) and CD11d/CD18 (ad β 2). Membrane expression of integrins requires the presence of CD18 subunit. The CD18 integrins are expressed exclusively on leucocytes and play an important role in homotypic and heterotypic cellular adhesion in immune and inflammatory responses. Patients who have mutated CD18 gene do not express cell membrane CD11/CD18 integrins, a condition known as leucocyte adhesion.

Isotype subclass: Mouse IgG1

Form: The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under optimum conditions. The reagent is adjusted for direct use. No reconstitution is necessary.

Physical state: Liquid

Buffer/Additives/Preservative: PBS containing 1% BSA and 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 4 °C. Avoid prolonged exposure to light.

Application: Flow Cytometry

References:

Bazil V. et al., Folia Biol. (Praha) 36, 41 (1990).

Drbal K. et al., Biochem. Biophys. Res. Commun. 275, 295 (2000).

Background: **CD18**, integrin β 2 subunit, forms heterodimers with four types of CD11 molecule to constitute leukocyte (β 2) integrins: α L β 2 (CD11a/CD18, LFA-1), α M β 2 (CD11b/CD18, Mac-1, CR3), α X β 2 (CD11c/CD18) and α D β 2 (CD11d/CD18). In most cases, the response mediated by the integrin is a composite of the functions of its individual subunits. These integrins are essential for proper leukocyte migration, mediating intercellular contacts. Absence of CD18 leads to leukocyte adhesion deficiency-1; severe reduction of CD18 expression leads to the development of a psoriasiform skin disease. CD18 is also a target of Mannheimia (Pasteurella) haemolytica leukotoxin and is sufficient to mediate leukotoxin-mediated cytolysis.

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.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

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