

anti-human CD18 Biotin-conjugated

Biotin-conjugated Monoclonal Antibody MEM-48 to CD18 (Human)

Cat-No: **21270182**

50 µg in 100 µl

Clone: MEM-48

Specificity: The antibody MEM-48 recognizes an epitope involving residues 534-546 in cysteine-rich repeat 3 of the CD18 antigen (integrin $\beta 2$ subunit; $\beta 2$ integrin). CD18 is a 90-95 kDa type I trans-membrane protein expressed on all leukocytes.

Isotype subclass: Mouse IgG1

Form: The purified antibody is conjugated with Biotin-LC-NHS under optimum conditions. The reagent is free of unconjugated biotin

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 4°C. For long-term storage aliquot and store at -20°C. Avoid freeze/thaw cycles.

Application: Flow Cytometry
Immunoprecipitation
Western Blotting
Immunohistochemistry (frozen sections)

Background: CD18, integrin $\beta 2$ subunit, forms heterodimers with four types of CD11 molecule to constitute leukocyte ($\beta 2$) integrins: $\alpha L\beta 2$ (CD11a/CD18, LFA-1), $\alpha M\beta 2$ (CD11b/CD18, Mac-1, CR3), $\alpha X\beta 2$ (CD11c/CD18) and $\alpha D\beta 2$ (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.

References: *Bazil V. et al., Folia Biol. (Praha) 36, 41 (1990).
*Drbal K. et al., Biochem. Biophys. Res. Commun. 275, 295 (2000).

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.

ImmunoTools Excellent Quality - Advantageously priced

Gladiolenweg 2; 26169 Friesoythe; Germany
phone: +49-(0)4491-400997, fax: +49-(0)4491-400998, info@immunotools.com
www.immunotools.com