

## anti-human CD18 APC-conjugated

**APC-conjugated monoclonal antibody MEM-148 to CD18 (Human)**

Cat-No: **21279186**

500 µl

**Clone:** MEM-148

**Specificity:** The antibody MEM-148 recognizes the epitope exposed on free human CD18 chains unassociated with CD11 as well as on high-affinity state of LFA-1. CD18 (integrin beta2 subunit; beta2 integrin) is a 90-95 kDa type I transmembrane protein expressed on all leukocytes.  
HLDA VI; WS Code AS A052.

**Negative Species:** Porcine

**Isotype subclass:** Mouse IgG1

**Form:** The purified antibody is conjugated with Allophycocyanin (APC) 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: The antibody is excellent marker of activated myeloid cells.

**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:

- \*) Drbal K, Angelisova P, Cerny J, Pavlistova D, Cebecauer M, Novak P, Horejsi Biochem Biophys Res Commun. 2000 Aug 28;275(2):295-9.
- \*) Drbal K, Angelisova P, Hilgert I, Cerny J, Novak P, Horejsi V. Blood. 2001 Sep 1;98(5):1561-6.
- \*) Drbal K, Angelisova P, Cerny J, Hilgert I, Horejsi V.: Immunobiology. 2001 May;203(4):687-98.
- \*) Leukocyte Typing VI. Kishimoto T. et al. (Eds.), Garland Publishing Inc. (1997).

**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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