

## Monoclonal antibody against human CD45 PE/Dy647 conjugated

Product Nos. ADG5053 and ADG5053L

### Description

**CD45** (LCA, leukocyte common antigen) is a receptor-type protein tyrosine phosphatase ubiquitously expressed in all nucleated hematopoietic cells, comprising approximately 10% of all surface proteins in lymphocytes. CD45 glycoprotein is crucial in lymphocyte development and antigen signaling, serving as an important regulator of Src-family kinases. CD45 protein exists as multiple isoforms as a result of alternative splicing; these isoforms differ in their extracellular domains, whereas they share identical transmembrane and cytoplasmic domains. These isoforms differ in their ability to translocate into the glycosphingolipid-enriched membrane domains and their expression depends on cell type and physiological state of the cell. Besides the role in immunoreceptor signaling, CD45 is important in promoting cell survival by modulating integrin-mediated signal transduction pathway and is also involved in DNA fragmentation during apoptosis.

### Properties

The monoclonal antibody ADG5053/L (clone MEM-28) is a murine monoclonal antibody, subclass IgG<sub>1</sub>. The antibody has been purified from cell culture supernatant using protein-A affinity chromatography, Purity > 95% (by SDS-PAGE).

The antibody reacts with all alternative forms of human CD45 antigen (Leukocyte Common Antigen), a 180-220 kDa single chain type I transmembrane protein expressed at high level on all cells of hematopoietic origin, except erythrocytes and platelets.

### Conjugation

The purified antibody is conjugated with Pa-Dy647 under optimum conditions. The reagent is adjusted for direct use. No reconstitution is necessary.

### Presentation

Vial containing 100 µl (ADGa0a3) or 2 ml (ADGa0a3L) of purified antibody in PBS containing 1% BSA and 0.09% sodium azide (pH 7.2). The IgG concentration is 1 mg/ml. Spin the vial briefly before opening.

### Storage and Stability

Store the antibody at 4°C. Avoid prolonged exposure to light. The reagent is stable until the expiry date stated on the vial label.

### Applications

Flow cytometry.

### References

Horejsi V. et al., Folia Biol. (Praha) 34, 23 (19aa)  
Bazil Vet al., Immunogenetics 29, 202 (19a9)  
Leucocyte typing IV. Knapp W. et al. (eds), Oxford University Press (19a9).

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