

Monoclonal Antibody To Human CD16

Marker for NK cells, Monocytes and Macrophages, and Neutrophils

Monoclonal antibody c127 recognizes CD16, the low affinity receptor for IgG (FcγRIII). CD16 is expressed on the majority of NK cells, on granulocytes, monocytes and macrophages, and on a subset of T cells. CD16 is involved in antibody-dependent cellular cytotoxicity (ADCC). This molecule is encoded by FcγRIII-A or FcγRIII-B genes. The genetic heterogeneity of FcγRIII generates alternative membrane-anchored proteins with distinct signalling capacities when cross-linked by immune complexes.

CD16 exists in two distinct forms, as a a single-pass type I integral membrane protein (CD16a), and as a glycosyl phosphatidyl inositol (GPI) form (CD16b). In humans, the transmembrane form is expressed on NK cells and macrophages while the GPI linked form is expressed on granulocytes. Antibody c127 has been described to detect both forms. However, immunohistochemically it reacts mainly with granulocytes.

Product number: T-1373

Clone: c127

Lot: 01PO0804

TECHNICAL AND ANALYTICAL CHARACTERISTICS:

Host species, subclass: Mouse IgG1

Quantity: 200µg

Format: Affinity purified, lyophilized

Reconstitute by adding 0.5ml distilled water. This stock solution contains 0.4mg/ml IgG, phosphate buffered saline pH 7.2 (PBS), 5mg/ml bovine serum albumin (BSA), and 0.09% sodium azide as a preservative.

Stability: Original vial: 1 year at 4° - 8°C

Stock solution or aliquots thereof: 1 year at -20°C. Avoid repeated thawing and freezing.

Applications: Tested for immunohistochemistry (IHC); has been described to work in FACS and immunoprecipitation.

Approximate working dilution for IHC:

Frozen sections: 0.5µg/ml 1:800)

Paraffin sections: not tested

Optimal dilutions should be determined by the end user.

Suggested positive control: Human placenta

Please see **www.bma.ch** for protocols and general information.

Antigen, epitope: The antigen is CD16.

Antigen distribution: **Isolated cells:** On flow cytometry it stains approximately 2-15% of peripheral blood lymphocytes.

Tissue sections: The antigen is strongly expressed on granulocytes in most tissues.

Specificity: **Human:** CD16

Other: not tested.

Selected references

Moretta A., Bottino C., Tripodi G., Vitale M., Pende D., Morelli L., Augugliaro R., Barbaresi M., Ciccone E., Millo R., Moretta L. Novel surface molecules involved in human NK cell activation and triggering of the lytic machinery. INT.J. CANCER. 7:6-10, 1992

For *in vitro* research only. Caution: this product contains sodium azide, a poisonous and hazardous substance.