

SM3063APC**Monoclonal Antibody to Human IgM (Fc-region) - APC****Alternate names:**

Human Immunoglobulin M

Quantity:

0.1 mg

Concentration:

0.1 mg/ml

Background:

Immunoglobulin M (IgM) is produced as a 900 kDa pentamer, which is an efficient complement binder. This antibody type is produced initially in the immune response and it is the first immunoglobulin class to be synthesized by a fetus or newborn. IgM antibodies do not cross the placenta. IgM concentration in blood is 0.12 g/l and its biological survival (plasma T1/2) is 5 days.

Host / Isotype:

Mouse / IgG1

Recommended Isotype Controls:

SM10APC (for use in human samples)

Clone:

CH2

Immunogen:

Purified Human IgM

Format:**State:** Liquid purified Ig fraction**Buffer System:** Phosphate buffered saline (PBS) solution containing 15mM sodium azide**Label:** APC – Conjugated with cross-linked Allophycocyanin (APC) under optimum conditions. The conjugate is purified by size-exclusion chromatography.**Applications:****Flow Cytometry:** 2 µg/ml is recommended starting point.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:The antibody (Clone CH2) reacts with *Fc* fragment of Human IgM.

Specificity was confirmed by Western blotting analysis of purified Human IgM under reducing conditions and also by Immunofluorescence staining of Daudi cells (the antibody CH2 blocks binding of standard antibody to *Fc* fragment of Human IgM and does not block binding of standard antibody to Fab fragment of Human IgM).

Species Reactivity:**Tested:** Human**Storage:**

Store the antibody undiluted at 2-8 °C.

DO NOT FREEZE!

This product is photosensitive and should be protected from light.

Should it contain a precipitate we recommend microcentrifugation before use.

Shelf life: one year from despatch.

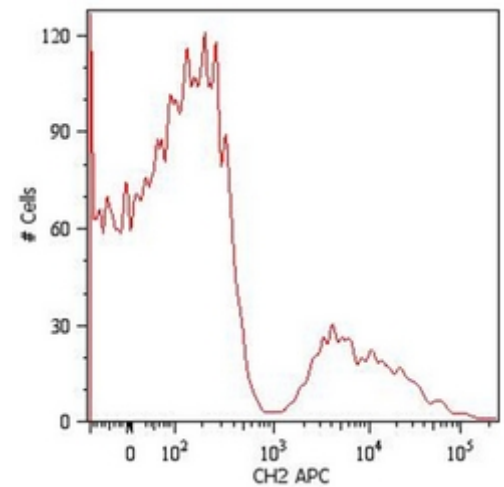
General Readings:

1. Franklin EC. Structure and function of immunoglobulins. Acta Endocrinol Suppl (Copenh). 1975;194:77-95. PubMed PMID: 47690.
2. Fuller JM, Keyser JW. Serum immunoglobulins after surgical operation. Clin Chem. 1975 May;21(6):667-71. PubMed PMID: 1122610.
3. Balogh Z, Merétey K, Falus A, Bozsóky S. Serological abnormalities in juvenile chronic arthritis: a review of 46 cases. Ann Rheum Dis. 1980 Apr;39(2):129-34. PubMed PMID: 6966908.

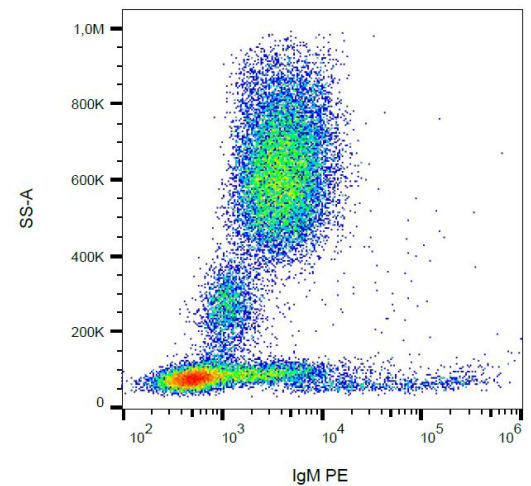
4. Brinkmann V, Heusser CH. T cell-dependent differentiation of human B cells into IgM, IgG, IgA, or IgE plasma cells: high rate of antibody production by IgE plasma cells, but limited clonal expansion of IgE precursors. Cell Immunol. 1993 Dec;152(2):323-32. PubMed PMID: 8258141.

Pictures:

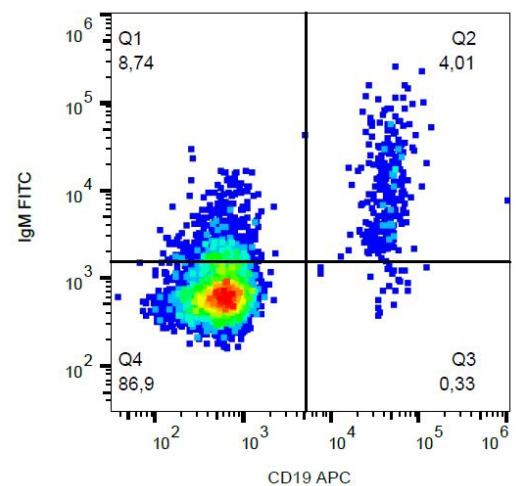
Surface staining of Human peripheral blood cells with anti-Human IgM Antibody (CH2) APC conjugated Cat.-No SM3063APC. Cells in the lymphocyte gate were used for analysis.



Surface staining of human peripheral blood cells with anti-human IgM (CH2) PE.



Surface staining of human peripheral blood cells with anti-human IgM (CH2) FITC.



Surface staining of human peripheral blood cells with anti-human IgM (CH2) PerCP-Cy5.5.

