

APC Mouse Anti-Human IgM

Purified APC-conjugated Recombinant Mouse Monoclonal Antibody

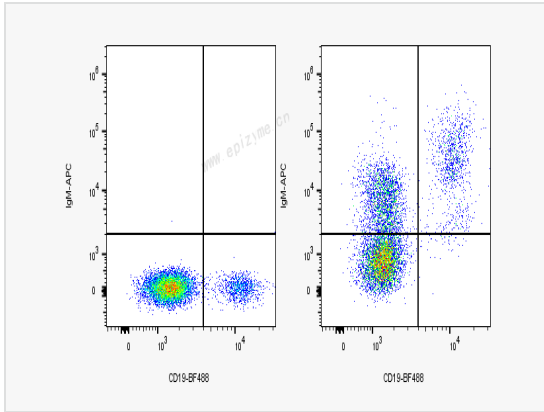
Catalog # F105115

Product Information

Application	FC
Recommended Usage	5 μ L per million cells in 100 μ L staining volume or 5 μ L per 100 μ L of whole blood.
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone No.	86M56M53
Isotype	IgG1, κ
Label	APC (Ex/Em: 651/660 nm)
Immunogen	Recombinant protein of human IgM
Format	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA.
Storage	Shipped on wet ice. Store undiluted between 2°C and 8°C and protected from prolonged exposure to light. Do not freeze.
Precautions	APC Mouse Anti-Human IgM [86M56M53] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Synonyms	Igh-6; Ighm; Immunoglobulin heavy constant mu.
Uniprot ID	P01871
Gene ID	3507
Background	<p>Immunoglobulins (Ig) are the antigen recognition molecules of B cells. An Ig molecule is made up of 2 identical heavy chains and 2 identical light chains (see MIM 147200) joined by disulfide bonds so that each heavy chain is linked to a light chain and the 2 heavy chains are linked together. Each Ig heavy chain has an N-terminal variable (V) region containing the antigen-binding site and a C-terminal constant (C) region, encoded by an individual C region gene, that determines the isotype of the antibody and provides effector or signaling functions. The heavy chain V region is encoded by 1 each of 3 types of genes: V genes (see MIM 147070), joining (J) genes (see MIM 147010), and diversity (D) genes (see MIM 146910). The C region genes are clustered downstream of the V region genes within the heavy chain locus on chromosome 14. The IGHM gene encodes the C region of the mu heavy chain, which defines the IgM isotype. Naive B cells express the transmembrane forms of IgM and IgD (see IGHD; MIM 1471770) on their surface. During an antibody response, activated B cells can switch to the expression of individual downstream heavy chain C region genes by a process of somatic recombination known as isotype switching. In addition, secreted Ig forms that act as antibodies can be produced by alternative RNA processing of the heavy chain C region sequences. Although the membrane forms of all Ig isotypes are monomeric, secreted IgM forms pentamers, and occasionally hexamers, in plasma (summary by Janeway et al., 2005).[supplied by OMIM, Aug 2010]</p>
Cellular Location	Isoform 1: Secreted; Note: During differentiation, B-lymphocytes switch from expression of membrane-bound IgM to secretion of IgM. Isoform 2: Cell membrane ; Single-pass membrane protein.



Typical flow-cytometry plots of human peripheral-blood leukocytes stained with anti-CD19-BF488 (F100606) and anti-IgM-APC (F105115) (right) or with anti-CD19-BF488 (F100606) alone as a control (left).