Assay Biotechnology Company
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Antibodies Product Datasheet

Product Name:	Human IgM Rabbit mAb
Catalog Number:	M0040
Reactivity:	Human
Applications:	WB, IHC-P, ELISA
Dilutions:	WB,1:500 - 1:1000 | IHC-P,1:50 - 1:200 | ELISA,Recommended starting concentration is 1 μg/mL. Please optimize the concentration based on your specific assay requirements.
Modification:	Unmodified
Source:	Rabbit
Isotype	IgG
Purification:	Affinity purification
Immunogen:	Recombinant fusion protein containing a sequence corresponding to amino acids 1-453 of human IgM (P01871).
Calculated MW (kDa):	49kDa
Observed MW (kDa):	75kDa
Gene Name:	IGHM
Other Name:	MU; VH; AGM1; Human IgM
Human Swiss Prot No.:	P01871
Formulation:	PBS with 0.02% sodium azide,0.05% BSA,50% glycerol,pH7.3.
Storage and Stability:	Store at -20℃/ 1 year. Avoid freeze / thaw cycles.

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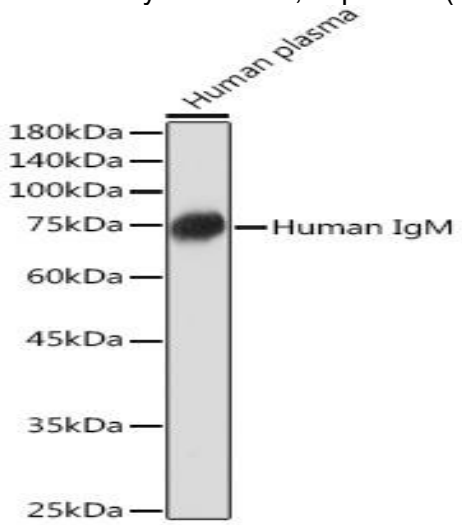
Background

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).

Data Image



Data Legend

Western blot analysis of lysates from Human plasma, using Human IgM Rabbit mAb (A19719) at 1:1000 dilution.|Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.|Lysates/proteins: 25 µg per lane.|Blocking buffer: 3% nonfat dry milk in TBST.|Detection: ECL Basic Kit (RM00020).|Exposure time: 10s.