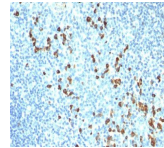


Human IgM Immunoglobulin Monoclonal Mouse Antibody (ICO-30)



Recognizes a protein of 75 kDa, identified as mu heavy chain of human immunoglobulins.

Product Description

Recognizes a protein of 75 kDa, identified as mu heavy chain of human immunoglobulins. It does not cross-react with alpha (IgA), gamma (IgG), epsilon (IgE), or delta (IgD), heavy chains, T-cells, monocytes, granulocytes, or erythrocytes. Monomeric IgM is expressed as a membrane bound antibody on the surface of B cells and as a pentamer when secreted by plasma cells. IgM antibody is prominent in early immune responses to most antigens. Aberrant levels are associated with immune deficiency states, hereditary deficiencies, myeloma, Waldenstrom's macroglobulinemia, chronic infection and hepatocellular disease. This MAb is useful in the identification of leukemias, plasmacytomas, and certain non-Hodgkin's lymphomas. The most common feature of these malignancies is the restricted expression of a single heavy chain class. Demonstration of clonality in lymphoid infiltrates indicates that the infiltrate is clonal and therefore malignant. Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors. **Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 0364, Anti-Human IgM Immunoglobulin (ICO-30)

Antibody #	prefix Conjugation	Ex/Em	Concentration	Storage Buffer
BNC04	CF®405S	404/431 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC05	CF®405M	408/452 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC88	CF®488A	490/515 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC43	CF®543	541/560 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC55	CF®555	555/565 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC68	CF®568	562/583 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC94	CF®594	593/614 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC40	CF®640R	642/662 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC47	CF®647	650/665 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC61	CF®660R	663/682 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC80	CF®680	681/698 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC81	CF®680R	680/701 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC70	CF®770	770/797 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNCR	R-PE (PE)	496, 546, 565/578 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNCA	APC	650/660 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNCP	PerCP	482/677 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNCB	Biotin	N/A	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNCAP	Alkaline Phosphatase	N/A	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNCH	Horseradish Peroxidase	N/A	0.1 mg/mL	PBS, 0.05% BSA, no azide
BNUB	Purified, with BSA	N/A	0.2 mg/mL	PBS, 0.05% BSA, 0.05% azide
BNUM	Purified, BSA-free	N/A	1 mg/mL	PBS, no BSA, no azide

References

Baryshnikov Alu. Gematol Transfuziol. 1990 Aug;35(8):4-7. Martinova T.et al., In: Problems medical biotechnology and immunological infection diseases. Vol 11, 182-186, 1996. Baryshnikov A, and Tonevitsky A, Monoclonal antibodies in laboratory and clinic. Thesis p212, 1997.

Product attributes

Antibody number	0364
Reactivity (target)	Human IgM
Antibody type	Anti-Human Immunoglobulin, Primary
Host species	Mouse
Clonality	Monoclonal
Clone	ICO-30
Isotype	IgG1, kappa
Molecular weight	50-75 kDa
Synonyms	AGM1; IGHM; Constant Region of Heavy Chain of IgM; Ig Mu Chain C Region
Human gene symbol	IGHM
Entrez gene ID	3507
SwissProt	P01871 & P20769
Unigene	510635
Immunogen	Heavy chain of human IgM
Cellular localization	Cytoplasmic, Membrane/cell surface, Secreted (extracellular)
Species reactivity	Human
Applications	Immunofluorescence, Immunohistology (formalin), Flow cytometry
Application notes	Immunohistology formalin-fixed 0.5-1 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes, Immunofluorescence 0.5-1 ug/mL, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user
Positive control	293T, Raji or hPBL cells. Tonsil or Spleen
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Research areas	Immunology
Cell/tissue expression	B-cells
Tumor expression	Leukemia/lymphoma