

Human IgA Immunoglobulin Monoclonal Mouse Antibody (IA-HISA43)

This mAb is specific to heavy chain of IgA and shows minimal cross-reaction with heavy chains of other immunoglobulins.

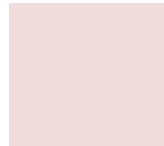
Product Description

This MAb is specific to heavy chain of IgA and shows minimal cross-reaction with heavy chains of other immunoglobulins. It is reactive with both IgA1 and IgA2 subclasses of Alpha heavy chain. It reacts with the third constant domain (CH3) of the alpha chain of IgA molecules. Immunoglobulins are four-chain, Y-shaped, monomeric structures comprised of two identical heavy chains and two identical light chains held together through inter-chain disulfide bonds. The chains form two domains, the Fab (antigen binding) fragment and the Fc (constant) fragment. Immunoglobulin A (IgA) is the main protein of the mucosal immune system. It is generated by B-cells in gut-associated lymphoid tissues. Daily production of IgA exceeds that of any of the other immunoglobulins. IgA exists mainly in dimers but can also exist as polymers or as monomers. Dimers and polymers contain a joining (J) chain that can be bound by the polymeric immunoglobulin receptor (pIgR) for transportation of the molecule to mucosal surfaces. The most common feature of plasmacytomas, and certain non-Hodgkin's lymphomas 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 0148, Anti-Human IgA Immunoglobulin (IA-HISA43)**

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	Horse radish 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

Biewenga J. et al. Monoclonal antibodies against different domains of human IgA: Specificities determined by immunoblotting and haemagglutination inhibition. *Mol. Immunol.* 23: 761-767 (1986). | Biewenga J. et al. Domain specificity and assay specificity of monoclonal antibodies against human IgA. *Adv. Exp. Med. Biol.* 216B: 1239-1249 (1987). | Mestecky J. et al. Evaluation of monoclonal antibodies with specificity for human IgA, IgA subclasses and allotypes and secretory component. Results of an IUIS/WHO collaborative study. *J. Immunol. Meth.* 193: 103-148 (1996)



Product attributes

Antibody number	0148
Reactivity (target)	Human IgA
Antibody type	Anti-Human Immunoglobulin, Primary
Host species	Mouse
Clonality	Monoclonal
Clone	IA-HISA43
Isotype	IgG1, kappa
Molecular weight	50-75 kDa
Synonyms	A2m Marker; Ig alpha 1 Chain C Region; IGHA1; IGHA2; Immunoglobulin Am1; Immunoglobulin Am2; Immunoglobulin Heavy Constant Alpha 1; Immunoglobulin Heavy Constant Alpha 2
Human gene symbol	IGHA1
Entrez gene ID	3493 (IGHA1), 3494 (IGHA2)
SwissProt	P01876 (IGHA1), P01877 (IGHA2)
Unigene	699841
Immunogen	Purified human IgA
Cellular localization	Cytoplasmic, Membrane/cell surface, Secreted (extracellular)
Species reactivity	Human
Applications	Immunofluorescence, Immunohistology (formalin), Flow cytometry
Application notes	Immunohistology formalin-fixed 0.5-1.0 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 0.5-1.0 ug/mL, Flow Cytometry 1-2 ug/million cells in 0.1 mL, Optimal dilution for a specific application should be determined by user
Positive control	Daudi, 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