

Human IgA Immunoglobulin Monoclonal Mouse Antibody (IA-HISA43)

Product Description

This MAbs 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.

References

Note: References for this clone sold by other suppliers may be listed for expected applications.

J Am Soc Nephrol (2006) 17: 1724 -1734. (affinity purification)

Product attributes

Antibody number	#0148
Antibody reactivity (target)	Human IgA
Antibody type	Primary, Anti-Human Immunoglobulin
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; Ig alpha 2 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
Antibody target cellular localization	Plasma membrane, Secreted (extracellular)
Verified antibody applications	IHC (FFPE) (verified)
Species reactivity	Human
Expected antibody applications	ELISA (published for clone), IP (published for clone)
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, 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/mlion 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)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Antibody research areas	Cancer, Immunology, Inflammation
Cell/tissue expression	B-cells
Tumor expression	Leukemia/lymphoma

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF@405S	404/431	405	DAPI (microscopy), AF405	CF@405S Features
BNC88	CF@488A	490/515	488	GFP, FITC	CF@488A Features
BNC68	CF@568	562/583	532, 561	RFP, TRITC	CF@568 Features
BNC94	CF@594	593/614	561	Texas Red®	CF@594 Features
BNC40	CF@640R	642/662	633-640	Cy@5	CF@640R Features
BNC47	CF@647	650/665	633-640	Cy@5	CF@647 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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