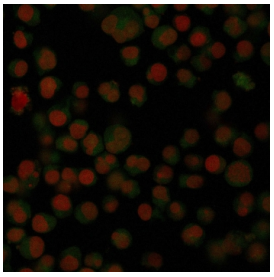
IgA Antibody for IF Clone IA761 / IGHA [clone IA761] (V2619)

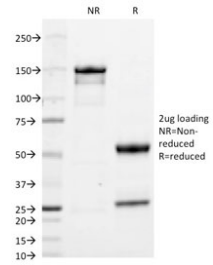
Catalog No.	Formulation	Size
V2619-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2619-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2619SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	IA761
Purity	Protein G affinity chromatography
UniProt	P01876, P01877
Localization	Cytoplasm, cell surface and secreted
Applications	Flow Cytometry : 1-2ul/10^6 cells Immunofluorescence : 0.5-1ug/ml 30 min RT Immunohistochemistry (FFPE) : 0.5-1ug/ml 30 min RT
Limitations	This IgA antibody is available for research use only.



IgA Antibody for IF Clone IA761 in human Raji cells by immunofluorescence. PFA-fixed human Raji cells were stained with CF488-conjugated IgA Antibody for IF Clone IA761, producing green fluorescence corresponding to Immunoglobulin alpha heavy chain (IGHA) signal within the cell population. Nuclei were counterstained with Reddot nuclear dye (red). The fluorescence pattern demonstrates detection of IgA-associated signal in cultured human B cell-derived Raji cells, enabling visualization of IgA-related immunoglobulin staining using immunofluorescence microscopy.



SDS-PAGE analysis of purified, BSA-free IgA antibody (clone IA761) as confirmation of integrity and purity.

Description

Immunoglobulin alpha heavy chain (IGHA) is the defining heavy chain component of immunoglobulin A (IgA), an antibody class that plays an important role in humoral and mucosal immune defense. IgA antibodies are produced by differentiated B lymphocytes and plasma cells and function to neutralize pathogens at mucosal surfaces and within the systemic circulation. The IgA Antibody for IF Clone IA761 recognizes the alpha heavy chain shared by IgA molecules and is useful for visualizing IgA-expressing cells in fluorescence-based imaging assays. Detection of IGHA expression enables identification of plasma cells and IgA-containing immunoglobulins within cultured cells and tissue samples.

IgA antibodies are present in two subclasses in humans, IgA1 and IgA2, both of which contain the immunoglobulin alpha heavy chain encoded by the IGHA gene locus. These subclasses differ primarily in hinge region length and susceptibility to bacterial proteases. IgA1 is generally the predominant form found in serum and many extracellular fluids, whereas IgA2 is relatively enriched in mucosal secretions where resistance to microbial enzymatic cleavage is advantageous. Antibodies targeting the conserved IGHA region therefore detect IgA molecules regardless of subclass.

IgA-producing plasma cells are widely distributed in lymphoid tissues including tonsils, lymph nodes, spleen, and mucosa-associated lymphoid tissues such as intestinal Peyer's patches. In mucosal environments IgA antibodies contribute to immune protection by binding microbial antigens and preventing pathogen attachment to epithelial surfaces. Polymeric IgA molecules can be transported across epithelial barriers through the polymeric immunoglobulin receptor, forming secretory IgA complexes that function in immune exclusion at mucosal surfaces.

Because IgA antibodies are produced by plasma cells during humoral immune responses, detection of Immunoglobulin alpha heavy chain expression is useful for examining antibody-producing cell populations. An IgA antibody suitable for immunofluorescence allows visualization of IgA-containing cells and immunoglobulin localization using fluorescence microscopy. This approach supports studies of plasma cell biology, antibody production, and immune responses in cultured cells and tissue samples where fluorescent detection methods provide high sensitivity and spatial resolution.

Application Notes

Optimal dilution of the IgA Antibody for IF Clone IA761 should be determined by the researcher.

1. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min

Immunogen

Purified human immunoglobulin alpha heavy chain was used as the immunogen for the Anti-IgA antibody.

Storage

Store the Anti-IgA antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

Immunoglobulin A antibody, IGHA antibody, Ig alpha heavy chain antibody, IgA heavy chain antibody, Alpha chain IgA antibody

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