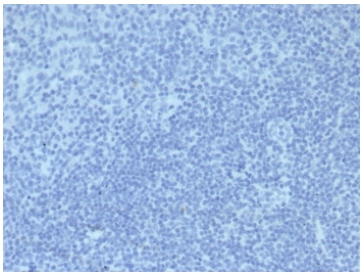
Mouse IgG2a Isotype Control Antibody [clone IGG2a/6723] (V5318)

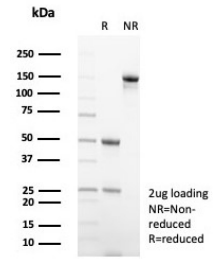
Catalog No.	Formulation	Size
V5318-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5318-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5318SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	NA
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a
Clone Name	IGG2a/6723
Purity	Protein A affinity
UniProt	Not Applicable
Localization	Assay dependent
Applications	ELISA: assay dependent Flow Cytometry: assay dependent Immunofluorescence: assay dependent Western blot: assay dependent Immunohistochemistry (FFPE): assay dependent
Limitations	This Mouse IgG2a Isotype Control antibody is available for research use only.



Mouse IgG2a Isotype Control Antibody Human Tonsil IHC. Immunohistochemistry staining of FFPE human tonsil tissue using Mouse IgG2a Isotype Control Antibody (clone IGG2a/6723) demonstrates absence of specific HRP-DAB staining, with only minimal background signal observed throughout the lymphoid tissue. The lack of distinct cellular labeling supports the utility of this reagent as a negative control for assessment of nonspecific antibody binding and background staining in immunohistochemical assays. Heat-induced epitope retrieval was performed by boiling tissue sections in pH 9 Tris-EDTA buffer (10 mM Tris, 1 mM EDTA) for 20 minutes followed by cooling prior to staining.



SDS-PAGE analysis of purified, BSA-free Mouse IgG2a Isotype Control antibody (IGG2a/6723) as confirmation of integrity and purity.

Description

Mouse IgG2a Isotype Control Antibody is designed as a negative control reagent for antibody-based immunoassays. This antibody matches the immunoglobulin subclass of mouse IgG2a primary antibodies while lacking specificity for known cellular or tissue antigens. By providing an isotype-matched control, it enables researchers to distinguish true antigen-specific staining from background signal resulting from nonspecific antibody interactions. Mouse IgG2a is among the most commonly used monoclonal antibody isotypes in biomedical research, making a reliable Mouse IgG2a Isotype Control Antibody an essential component of assay validation workflows.

In immunohistochemistry, immunofluorescence, flow cytometry, ELISA, and related applications, nonspecific staining can arise through Fc receptor interactions, binding to charged cellular components, endogenous immunoglobulins, or other assay-dependent factors. The Mouse IgG2a Isotype Control Antibody clone IGG2a/6723 is formulated to mirror the structural characteristics of experimental mouse IgG2a antibodies without recognizing the intended target antigen. This allows investigators to measure background staining levels and determine whether observed signal reflects genuine antigen expression or nonspecific binding events.

Flow cytometry and FACS experiments frequently incorporate a Mouse IgG2a Isotype Control Antibody to evaluate baseline fluorescence and establish appropriate gating strategies. In immunofluorescence microscopy, the reagent helps identify nonspecific fluorescence and supports interpretation of staining patterns. For immunohistochemistry applications, the control assists in differentiating true tissue antigen localization from background staining associated with endogenous tissue components. By providing a consistent negative control, the reagent improves confidence in data interpretation across multiple assay platforms.

Mouse IgG2a antibodies are widely used for detection of cell surface markers, intracellular proteins, signaling molecules, cancer biomarkers, immune regulators, and lineage-specific antigens. Inclusion of a matched Mouse IgG2a Isotype Control Antibody is particularly important when studying low-abundance targets or samples with elevated background staining. Common search terms including mouse IgG2a isotype control, mouse monoclonal isotype control antibody, IgG2a negative control antibody, and mouse IgG2a control antibody further reflect the widespread use of this reagent in research laboratories worldwide.

NSJ Bioreagents provides Mouse IgG2a Isotype Control Antibody as a dependable negative control for assay optimization, background staining assessment, and experimental validation. By helping researchers distinguish nonspecific signal from specific antibody binding, this reagent improves the accuracy, reproducibility, and scientific confidence of immunological, cellular, and molecular biology studies.

Researchers utilizing negative controls for immunohistochemistry, flow cytometry, immunofluorescence, and other antibody-based assays may also be interested in our Isotype Control Antibodies page featuring reagents for background staining assessment and assay validation.

Application Notes

Optimal dilution of the Mouse IgG2a Isotype Control antibody should be determined by the researcher.

Immunogen

Recombinant full-length human IG1R protein was used as the immunogen for the Mouse IgG2a Isotype Control antibody.

Storage

Aliquot the Mouse IgG2a Isotype Control antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Mouse IgG2a Isotype Control Antibody, Mouse IgG2a Control Antibody, Mouse IgG2a Negative Control Antibody, Mouse Monoclonal IgG2a Isotype Control, IgG2a Isotype Matched Control Antibody, Mouse IgG2a Isotype Control for Flow Cytometry, Mouse IgG2a Isotype Control for Immunohistochemistry, Mouse IgG2a Isotype Control for Immunofluorescence

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