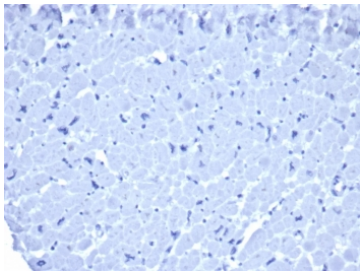
Mouse IgG1 Isotype Control Antibody [clone ICG1/1331] (V5377)

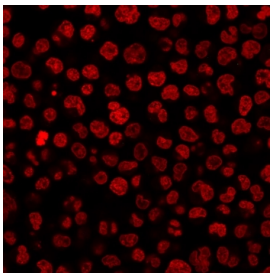
Catalog No.	Formulation	Size
V5377-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5377-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5377SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

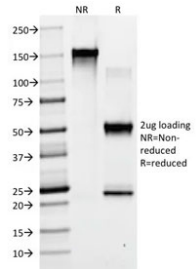
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	ICG1/1331
Purity	Protein A/G affinity
Applications	Flow cytometry: application dependent Immunofluorescence: application dependent Immunohistochemistry (FFPE): application dependent Western blot: application dependent
Limitations	This mouse IgG1 antibody is available for research use only.



Mouse IgG1 Isotype Control Antibody Human Heart IHC. Immunohistochemistry staining of FFPE human heart tissue using Mouse IgG1 Isotype Control Antibody (clone IGG1/1331) demonstrates absence of specific HRP-DAB staining, with only minimal background signal observed throughout the cardiac 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.



Mouse IgG1 Isotype Control Antibody Raji IF. Immunofluorescence staining of PFA-fixed human Raji cells using Mouse IgG1 Isotype Control Antibody (clone IGG1/1331) demonstrates absence of specific fluorescence staining, with only minimal background signal observed throughout the cell population. The lack of distinct cellular labeling supports the use of this reagent as a negative control for assessment of nonspecific antibody binding and background fluorescence in immunofluorescence assays. Nuclei are visualized with RedDot nuclear stain (red). The observed staining profile confirms the suitability of this Mouse IgG1 Isotype Control Antibody for validation of fluorescence-based antibody experiments.



SDS-PAGE analysis of purified, BSA-free mouse IgG1 antibody (clone ICG1/ 1331) as confirmation of integrity and purity.

Description

Mouse IgG1 Isotype Control Antibody is designed as a negative control reagent for antibody-based immunoassays. This antibody matches the immunoglobulin subclass of mouse IgG1 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 IgG1 is among the most frequently used monoclonal antibody isotypes in biomedical research, making a reliable Mouse IgG1 Isotype Control Antibody an important component of assay validation and optimization workflows.

In immunohistochemistry, immunofluorescence, flow cytometry, ELISA, and related applications, nonspecific staining can arise through Fc receptor interactions, binding to endogenous cellular components, tissue-associated immunoglobulins, or other assay-dependent factors. The Mouse IgG1 Isotype Control Antibody, clone ICG1/1331, is formulated to mirror the structural characteristics of experimental mouse IgG1 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 commonly incorporate a Mouse IgG1 Isotype Control Antibody to evaluate baseline fluorescence and support appropriate gating strategies. In immunofluorescence microscopy, the reagent helps identify nonspecific fluorescence and assists in interpretation of staining patterns. For immunohistochemistry applications, the control supports differentiation of 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 IgG1 antibodies are widely used for detection of immune cell markers, cancer biomarkers, signaling proteins, cell surface receptors, intracellular targets, and lineage-associated antigens. Inclusion of a matched Mouse IgG1 Isotype Control Antibody is particularly valuable when analyzing low-abundance targets or specimens prone to elevated background staining. Common search terms including mouse IgG1 isotype control, mouse monoclonal isotype control antibody, IgG1 negative control antibody, and mouse IgG1 control antibody further reflect the widespread use of this reagent throughout biological research laboratories.

NSJ Bioreagents provides Mouse IgG1 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 IgG1 antibody should be determined by the researcher.

Immunogen

Recombinant full-length human IG1R protein was used as the immunogen for the mouse IgG1 antibody.

Storage

Aliquot the mouse IgG1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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