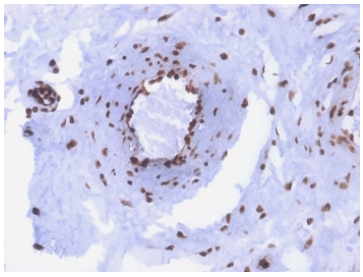
Recombinant dsDNA Antibody [clone rDSD/4565] (V8639)

Catalog No.	Formulation	Size
V8639-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8639-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8639SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

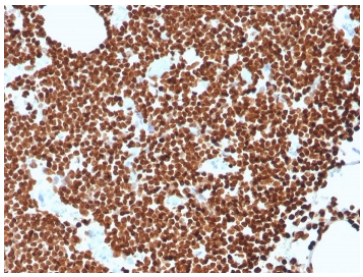
Recombinant MOUSE MONOCLONAL

Bulk quote request

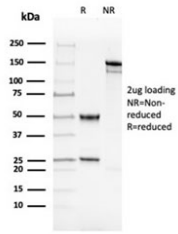
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG2a, kappa
Clone Name	rDSD/4565
Purity	Protein G affinity chromatography
UniProt	Not Applicable
Localization	Nuclear
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT Immunofluorescence: 1-3ug/ml
Limitations	This recombinant dsDNA antibody is available for research use only.



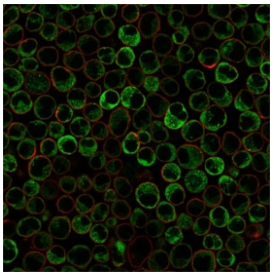
IHC staining of FFPE human colon with recombinant dsDNA antibody (clone rDSD/4565). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human lymph node with recombinant dsDNA antibody (clone rDSD/4565). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free recombinant dsDNA antibody (clone rDSD/4565) as confirmation of integrity and purity.



Immunofluorescent staining of PFA-fixed human Raji cells with recombinant dsDNA antibody (clone rDSD/4565, green) and Phalloidin (red).

Description

Recombinant dsDNA antibody detects double-stranded DNA, the canonical genetic material found in eukaryotes, prokaryotes, and many viruses. Unlike protein-specific antibodies, dsDNA antibodies recognize DNA structures independent of sequence, making them valuable for immunology, autoimmunity, and molecular biology research. Because dsDNA antibodies are hallmarks of systemic lupus erythematosus and other autoimmune conditions, Recombinant dsDNA antibody is widely used in both clinical and basic studies.

Double-stranded DNA is composed of complementary strands of nucleotides paired through hydrogen bonds between adenine-thymine and cytosine-guanine bases. Its helical structure stores genetic information and serves as the template for replication and transcription. In pathology, antibodies against dsDNA are considered highly specific for lupus and are used diagnostically as markers of disease activity.

The Recombinant dsDNA antibody clone rDSD/4565 provides consistent and reproducible recognition of double-stranded DNA. Recombinant technology ensures lot-to-lot uniformity, reducing variability in assays. Clone rDSD/4565 has been cited in peer-reviewed research examining lupus autoantibodies, DNA repair mechanisms, and chromatin biology. Its versatility supports use in ELISA, immunofluorescence, and molecular assays that require DNA detection.

Research using clone rDSD/4565 has clarified how anti-dsDNA antibodies participate in lupus pathogenesis, forming immune complexes that deposit in tissues and trigger inflammation. This antibody has also been applied in studies of DNA stability, chromatin structure, and cell death, where dsDNA release serves as a damage-associated molecular pattern. Its broad utility makes it a valuable tool across both clinical immunology and molecular biology.

NSJ Bioreagents provides this Recombinant dsDNA antibody to support autoimmunity research, molecular biology, and clinical diagnostics. Alternate terms include double-stranded DNA antibody, lupus autoantibody marker antibody, chromatin component antibody, DNA helix antibody, and genomic DNA antibody.

Application Notes

Optimal dilution of the recombinant dsDNA antibody should be determined by the researcher.

Immunogen

Nuclei of Burkitt cells were used as the immunogen for the recombinant dsDNA antibody.

Storage

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

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