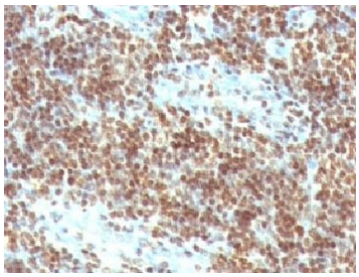
Double Stranded DNA Antibody / dsDNA [clone DSD/958] (V3104)

Catalog No.	Formulation	Size
V3104-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3104-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3104SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3104IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

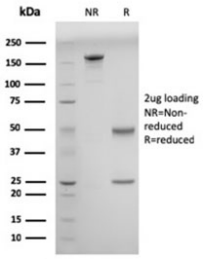
Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG3, kappa
Clone Name	DSD/958
Purity	Protein G affinity chromatography
UniProt	Not Known
Localization	Nuclear
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This Double Stranded DNA antibody is available for research use only.

IHC: Formalin-fixed, paraffin-embedded human colon carcinoma stained with Double Stranded DNA antibody (clone DSD/958).



IHC: Formalin-fixed, paraffin-embedded human tonsil stained with Double Stranded DNA antibody (clone DSD/958).



SDS-PAGE analysis of purified, BSA-free Double Stranded DNA antibody (clone DSD/958) as confirmation of integrity and purity.

Description

Double Stranded DNA antibody clone DSD/958 is a monoclonal antibody directed against dsDNA, the molecule that encodes hereditary information and maintains genomic stability. Antibodies against dsDNA are valuable tools in autoimmunity, where they serve as key biomarkers, and in molecular biology, where they support DNA integrity studies. NSJ Bioreagents provides this antibody for research in immunology, oncology, and genome biology.

The antibody produces strong nuclear staining that corresponds to chromosomal DNA within the nucleus. In autoimmunity, dsDNA antibodies are considered a hallmark of systemic lupus erythematosus. Clone DSD/958 supports investigations into autoimmune pathogenesis by enabling reproducible detection of dsDNA autoantigens, making it suitable for both mechanistic studies and translational research.

In cancer biology, the antibody supports monitoring of DNA damage and repair pathways. Because DNA double-strand breaks contribute to tumorigenesis, accurate detection is essential for understanding genomic instability in cancer. This antibody has been applied to models exploring how DNA repair pathways influence sensitivity to chemotherapy and radiation therapy.

In apoptosis research, double-stranded DNA antibodies are used to detect DNA fragmentation during programmed cell death. Clone DSD/958 provides a consistent tool for quantifying apoptotic changes in both tissue and culture systems.

In molecular biology, dsDNA antibody clone DSD/958 has been used to study DNA replication, chromatin structure, and epigenetic regulation. Its ability to reliably bind nuclear DNA allows investigators to track DNA-associated processes in diverse cell types.

The antibody has further application in virology, where dsDNA viruses rely on replication and transcription of double-stranded genomes. Detecting viral DNA with this antibody provides insights into infection mechanisms and host defense responses.

Validated in tissue-based and cell-based assays, the antibody consistently provides robust nuclear staining with minimal background. Alternate names include dsDNA antibody, double-stranded DNA marker antibody, and nuclear DNA antibody.

Application Notes

Optimal dilution of the Double Stranded DNA antibody should be determined by the researcher.

1. Staining of formalin-fixed tissues requires boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Nuclei of Burkitt's cells were used as the immunogen for the Double Stranded DNA antibody.

Storage

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

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