

## Double-Stranded DNA Monoclonal Mouse Antibody (121-3)



### Product Description

This monoclonal antibody is part of a new panel of reagents, which recognizes subcellular organelles or compartments of human cells. These markers may be useful in identification of these organelles in cells, tissues, and biochemical preparations. This MAb recognizes the double stranded DNA in human cells. It can be used to stain the nuclei in cell or tissue preparations and can be used as a nuclear marker in human cells. This MAb produces a homogeneous staining pattern in the nucleus of normal and malignant cells. Deoxyribonucleic acid (DNA) is a long polymer of nucleotides that is held together by a backbone made of sugars and phosphate groups. It holds the genetic instructions for the development and function of living things. DNA is crucial for living organisms, and all known cellular life and some viruses contain DNA. In eukaryotes, DNA exists in the cell nucleus, while in prokaryotes; DNA is located in the cytoplasm. In living organisms, DNA does not usually exist as a single molecule, but instead as a tightly associated pair of molecules in the shape of a right-handed double helix. Hydrogen bonds as well as forces generated by the hydrophobic effect and pi stacking hold the two DNA strands together. During replication and transcription, portions of the helix unwind and become single stranded. Protective proteins surround these single-stranded DNA. Double stranded (ds) DNA markers are useful tools in biology research and aid in the study of DNA behavior and characteristics. Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors. **Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email [order@biotium.com](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order. **Catalog number key for antibody number 0945, Anti-Double-Stranded DNA (121-3)**

### Product attributes

Antibody number	#0945
Antibody reactivity (target)	Double-Stranded DNA
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	121-3
Isotype	IgG3, kappa
Molecular weight	Not Known
Synonyms	Not Known
Entrez gene ID	Not Known
SwissProt	Not Known
Unigene	Not Known
Immunogen	Nuclei of Burkitt's cells
Antibody target cellular localization	Nucleus
Verified antibody applications	Flow (intracellular) (verified), IHC (FFPE) (verified)
Species reactivity	Human
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 1-2 ug/mL, Flow Cytometry 0.5-1 ug/million cells/0.1 mL
Positive control	Tonsil
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Antibody research areas	Organelle markers

## Catalog Number Key for Primary Antibody Conjugates

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	<a href="#">CF®405S Features</a>
BNC88	CF®488A	490/515	488	GFP, FITC	<a href="#">CF®488A Features</a>
BNC68	CF®568	562/583	532, 561	RFP, TRITC	<a href="#">CF®568 Features</a>
BNC94	CF®594	593/614	561	Texas Red®	<a href="#">CF®594 Features</a>
BNC40	CF®640R	642/662	633-640	Cy®5	<a href="#">CF®640R Features</a>
BNC47	CF®647	650/665	633-640	Cy®5	<a href="#">CF®647 Features</a>
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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