

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 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 |
| Product origin | Product may contain either bovine serum albumin (BSA) from bovine serum (<i>Bos taurus</i>), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot. |

| Antibody # prefix | Conjugation | Ex/Em (nm) | Laser line | Detection channel | Dye Features |
|-------------------|--------------------|------------|------------|--------------------------|----------------------------------|
| BNC04 | CF®405S | 404/431 | 405 | DAPI (microscopy), AF405 | CF®405S Features |
| BNC88 | CF®488A | 490/515 | 488 | GFP, FITC | CF®488A Features |
| BNC68 | CF®568 | 562/583 | 532, 561 | RFP, TRITC | CF®568 Features |
| BNC94 | CF®594 | 593/614 | 561 | Texas Red® | CF®594 Features |
| BNC40 | CF®640R | 642/662 | 633-640 | Cy®5 | CF®640R Features |
| BNC47 | CF®647 | 650/665 | 633-640 | Cy®5 | CF®647 Features |
| BNC74 | CF®740 | 742/767 | 633-685 | 775/50 | CF®740 Features |
| 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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