

# Double Stranded DNA (dsDNA) (Nuclear Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone 121-3 ]  
Catalog # AH12900

## Product Information

---

<b>Application</b>	IF, FC, ICC
<b>Reactivity</b>	Human
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype</b>	Mouse / IgG3, kappa
<b>Clone Names</b>	121-3
<b>Calculated MW</b>	Not Known

## Additional Information

---

<b>Application Note</b>	IF~~1:50~200 FC~~1:10~50 ICC~~N/A
<b>Storage</b>	Store at 2 to 8°C.Antibody is stable for 24 months.
<b>Precautions</b>	Double Stranded DNA (dsDNA) (Nuclear Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

## Background

---

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.

## References

---

Epstein, A.L. and Clevenger, C.V., Identification of nuclear antigens in human cells by immunofluorescence,

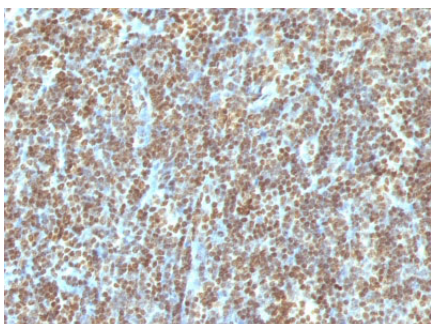
immuno-electron microscopy, and immuno-biochemical methods using monoclonal antibodies. In Progress on nonhistone protein research, Vol. 1, Isaac Bekhor, ed., 1985, CRC Press, Boca Raton, FL, pp 117-137

## Images

---



Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with Double Stranded DNA Monoclonal Antibody (121-3)



Formalin-fixed, paraffin-embedded human Tonsil stained with Double Stranded DNA Monoclonal Antibody (121-3)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.