

## DNA-RNA Hybrid Monoclonal Antibody[S9.6]

catalog number: E-AB-48028

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

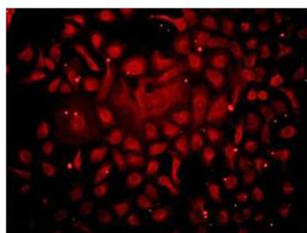
### Description

<b>Reactivity</b>	All
<b>Immunogen</b>	ΦX174 bacteriophage-derived synthetic DNA/RNA
<b>Host</b>	Mouse
<b>Isotype</b>	IgG2a
<b>Clone</b>	S9.6
<b>Purification</b>	Protein A/G Purification
<b>Buffer</b>	PBS with 0.05% Proclin300, 1% protective protein and 50% glycerol, pH7.4

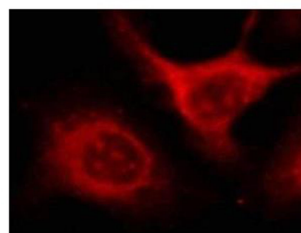
### Applications

Applications	Recommended Dilution
IF	1:200
ChIP	1:50-500

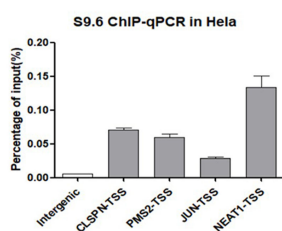
### Data



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using DNA-RNA hybrid mouse monoclonal antibody [S9.6] at dilution of 1:500.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using anti-DNA-RNA hybrid Mouse Monoclonal Antibody [S9.6] at dilution of 1:500.



Chromatin immunoprecipitation analysis of HeLa cells genomic DNA(gDNA) using DNA-RNA hybrid Mouse Monoclonal Antibody [S9.6] at dilution of 1:200.

### Preparation & Storage

<b>Storage</b>	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
<b>Shipping</b>	The product is shipped with ice pack, upon receipt, store it immediately at the temperature recommended.

### Background

### For Research Use Only

The DNA-RNA hybrids are a natural occurrence within eukaryotic cells and their level are high at sites of high transcriptional activity. They are non-canonical nucleic acid structures with transcriptional regulatory functions. Their presence is reported to predispose a locus to chromosomal breakage. The S9.6 monoclonal antibody recognizes DNA-RNA hybrids (also known as R-loops) and does not bind to single or double stranded DNA. The antibody has high affinity for DNA-RNA hybrids but also binds RNA-RNA hybrids that are AU-rich. The specificity of the antibody appears to be determined by a combination of sequence and structural dependency since R-loop sequence affects binding affinity.