DNA-RNA Hybrid Antibody

Mouse Monoclonal Antibody [Clone S9.6]

Catalog No	Format	Size
MSM1-2006-P0	Purified Ab with BSA and Azide	200ug/ml
MSM1-2006-P1	Purified Ab with BSA and Azide	200ug/ml
MSM1-2006-P1ABX	Purified Ab WITHOUT BSA and Azide	1.0mg/ml

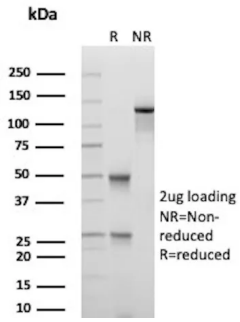
Applications	Tested Dillution
Flow Cytometry (Flow)	1-2ug/million cells
Immunofluorescence (IF)	1-3ug/ml

Product Details

Clone	S9.6
Gene Name	
Immunogen	DNA-RNA heteropolymer duplex prepared by transcription of phi X174 single-stranded DNA with DNA-dependent RNA polymerase
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2a / Kappa
Mol. Weight of Antigen	Not Known
Cellular Localization	Nucleus
Species Reactivity	All species, Human
Positive Control	All. Target DNA-RNA heteroduplex (R loop) structure is not sequence-specific or species-specific.

**Optimal dilution for a specific application should be determined.*

Product Images for DNA-RNA Hybrid Antibody



SDS-PAGE Analysis of Purified DNA-RNA Hybrid Mouse Monoclonal Antibody (S9.6).
Confirmation of Purity and Integrity of Antibody.

Specificity & Comments

We have not tested this antibody in-house in Immunofluorescence, CHIP, Immunocytochemistry, Immunoprecipitation or Flow Cytometry. All application recommendations come from publications using this clone. 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. A locus forming an DNA:RNA creates a double-stranded A/B intermediate conformation, with a second target for single-stranded nucleic acid binding proteins on the complementary, displaced DNA strand. They are shown to be resistant to the activity of DNA methyltransferases. The formation of DNA:RNA hybrids has been associated with a number of neurological diseases. Mutations in the DNA:RNA helicase senataxin (SETX) are implicated in the dominant juvenile form of amyotrophic lateral sclerosis type 4 and a recessive form of ataxia oculomotor apraxia type 2. Clone S9.6 bound the DNA-RNA heteropolymer and poly(I)-poly(dC) equally, but 100-fold higher levels of poly(A)-poly(dT) were required to achieve a similar degree of binding. Single-stranded DNA, double-stranded DNA and RNA, and ribosomal RNA were not bound by clone S9.6 (Boguslawski, S.J., et al. (1986). J. Immunol Methods. 89(1):123-130).

Known Applications & Suggested Dilutions

Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C.Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.

There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.