

Mouse Anti-Musashi1 (Msi1) [69-Q]: MC0975, MC0975RTU7

Intended Use: For Research Use Only

Description: Musashi1 (Msi1) is a crucial RNA-binding protein predominantly expressed in neural progenitor cells and neural stem cells, playing a significant role in the regulation of cell fate during development. The gene encoding human Msi1 produces a 362 amino acid protein that is essential for maintaining the balance between self-renewal and differentiation of stem cells in the central nervous system. Msi1 (69-Q) antibody localizes to the cytoplasm in murine embryonic neural progenitor cells and shows decreased expression as these cells differentiate, highlighting its importance in the early stages of neural development. Msi1 interacts with NUMB, a protein that serves as a membrane-associated antagonist of Notch signaling, thereby influencing critical pathways involved in cell proliferation and differentiation. Beyond serving as a marker for neural progenitor cells in healthy human brains, Msi1 is also implicated in human gliomas, making Msi1 a valuable target for cancer research. Msi1 expression extends to Sertoli cells of the testis and granulosa cells of the ovary in rats, underscoring Msi1's diverse biological significance across different tissues.

Specifications:

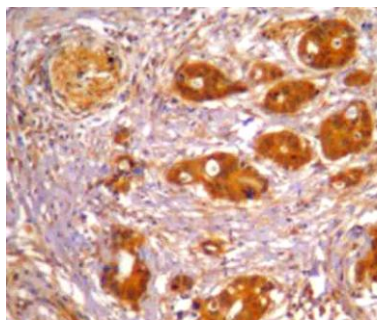
Clone:	69-Q
Source:	Mouse
Isotype :	IgG2a
Reactivity:	Human, mouse, rat
Immunogen:	Human Msi1 N-terminal region aa 1-87
Localization:	Cytoplasm, nucleus
Formulation:	Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN ₃).
Storage:	Store at 2°- 8°C
Applications:	IHC, ELISA, IF, IP, WB
Package:	

Description	Catalog No.	Size
Musashi1 (Msi1) Concentrated	MC0975	1 ml
Musashi1 (Msi1) Prediluted	MC0975RTU7	7 ml

IHC Procedure*:

Positive Control Tissue:	Brain
Concentrated Dilution:	50-200
Pretreatment:	Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C
Incubation Time and Temp:	30-60 minutes @ RT
Detection:	Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human tubular adenocarcinoma stained with anti-Musashi1 using DAB

References:

1. Tau oligomers mediate aggregation of RNA-binding proteins Musashi1 and Musashi2 inducing Lamin alteration. Mauro Montalbano, et al. Aging Cell. Dec;18(6):e13035, 2019. doi: 10.1111/ace1.13035.
2. Group I Paks are essential for epithelial- mesenchymal transition in an Apc-driven model of colorectal cancer. H Y Chow, et al. Nat Commun. Aug 27;9(1):3473, 2018. doi: 10.1038/s41467-018-05935-6.

Doc. 100-MC0975

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