



Rabbit Anti-Musashi 1 antibody

SL11201R

Product Name:	Musashi 1
Chinese Name:	神经Stem cellsRNABinding proteinMusashi1抗体
Alias:	Musashi 1 / Msi1; Msi 1; Msi1; Msi-1; MS11H_HUMAN; Musashi homolog 1; Musashi-1; Musashi1; RNA binding protein Musashi homolog 1; RNA-binding protein Musashi homolog 1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Rabbit,
Applications:	IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	39kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Musashi 1:66-150/362
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Musashi1 (Msi1) is an RNA-binding protein expressed in neural progenitor cells and neural stem cells. Msi1 is the mammalian homolog of Drosophila Musashi. The gene encoding human Msi1 encodes a 362 amino acid protein. In murine embryonic neural progenitor cells, Msi1 localizes to the cytoplasm and is downregulated during differentiation. Msi1 binds to NUMB, which encodes a membrane-associated antagonist

of Notch signaling. Msi1 appears to function in the proliferation and maintenance of stem cell populations of the central nervous system. In addition to its usefulness as a marker for neural progenitor cells in normal human brains, Msi1 is also a marker for human gliomas. In rats, Msi1 is expressed in Sertoli cells of the testis and granulosa cells of the ovary.

Function:

RNA binding protein that regulates the expression of target mRNAs at the translation level. Regulates expression of the NOTCH1 antagonist NUMB. Binds RNA containing the sequence 5'-GUUAGUUAGUUAGUU-3' and other sequences containing the pattern 5'-[GA]U(1-3)AGU-3'. May play a role in the proliferation and maintenance of stem cells in the central nervous system.

Subcellular Location:

Cytoplasm. Nucleus.

Tissue Specificity:

Detected in fetal kidney, brain, liver and lung, and in adult brain and pancreas. Detected in hepatoma cell lines.

Similarity:

Belongs to the Musashi family.
Contains 2 RRM (RNA recognition motif) domains.

SWISS:

O43347

Gene ID:

4440

Database links:

[Entrez Gene: 4440](#) Human

[Entrez Gene: 17690](#) Mouse

[Entrez Gene: 259272](#) Rat

[Omim: 603328](#) Human

[SwissProt: O43347](#) Human

[SwissProt: Q61474](#) Mouse

[SwissProt: Q8K3P4](#) Rat

[Unigene: 158311](#) Human

[Unigene: 5077](#) Mouse

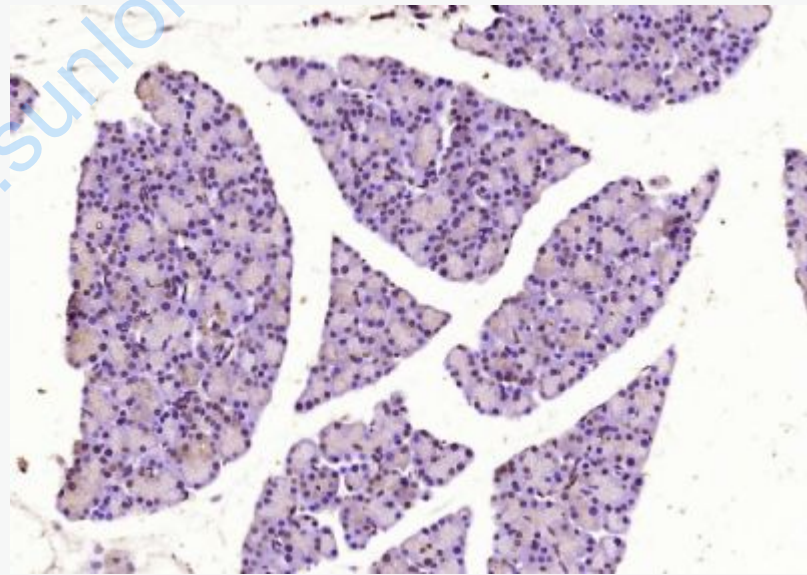
[Unigene: 162146](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

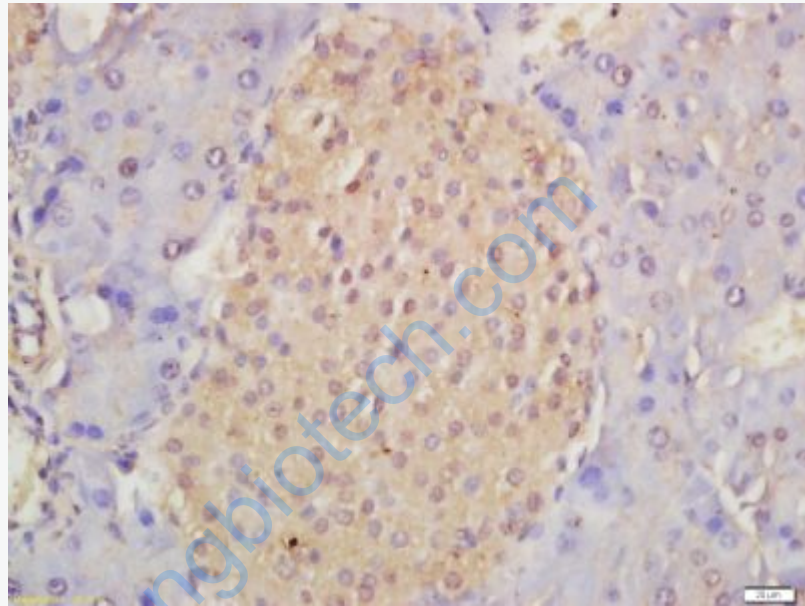
Musashi1是一种进化保守的RNABinding protein, 在维持Stem cells状态、分化和Tumour发生方面起着重要作用。Musashi1选择性地表达在神经前体细胞上,包括神经Stem cells上。在神经系统外, Musashi1还是肠Stem cells的选择性标记。这些组织Stem cells或未成熟细胞Musashi1的表达, 表明Musashi1在转录后基因调节阶段维持这些细胞未分化状态起重要作用。Musashi1过度表达通过依赖RBP2Jk的旁路激活Notch 1, 而Notch信号途径功能为诱导哺乳动物神经Stem cells自我更新。通过musashi1-P-小鼠培养脑细胞的Musashi蛋白产物反义去除研究,发现这些基因在维持神经Stem cells未分化状态起着重要的作用。Musashi抑制m-Numb转录的分子机制尚待进一步研究。Musashi1有可能除转录调控外还参与其他调控途径。另外, Musashi1还表达在一些脑Tumour的特殊类型(这些Tumour可能起源于非成熟脑细胞), 并且表达水平和Tumour的恶性程度及增殖能力相关。

Picture:



Paraformaldehyde-fixed, paraffin embedded (rat pancreas); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C

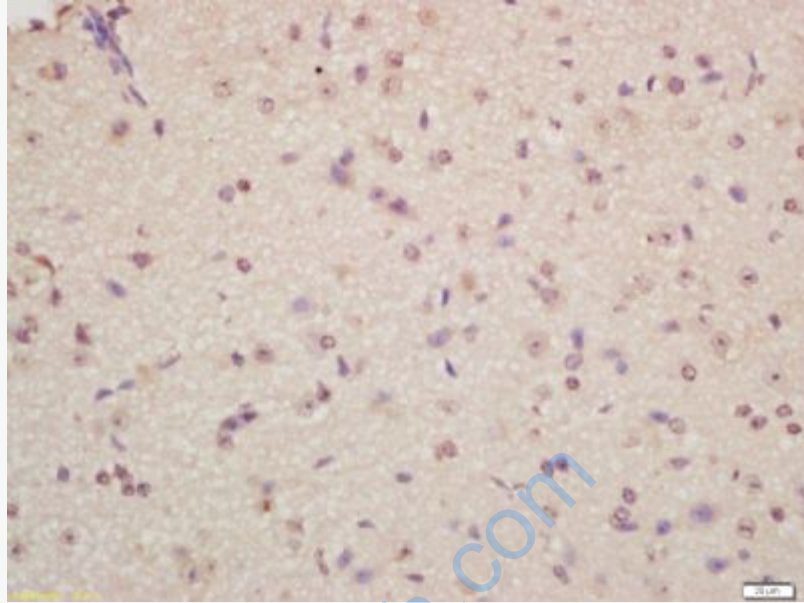
for 30min; Antibody incubation with (Musashi 1) Polyclonal Antibody, Unconjugated (SL11201R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Tissue/cell: mouse pancreas tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-Musashi-1 Polyclonal Antibody, Unconjugated(SL11201R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: mouse brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-Musashi-1 Polyclonal Antibody, Unconjugated(SL11201R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining