

**Anti-Musashi 1/Msi1 Picoband Antibody**  
Catalog # ABO10316**Specification****Anti-Musashi 1/Msi1 Picoband Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">O43347</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for RNA-binding protein Musashi homolog 1(MSI1) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-Musashi 1/Msi1 Picoband Antibody - Additional Information**

**Gene ID** 4440

**Other Names**

RNA-binding protein Musashi homolog 1, Musashi-1, MSI1

**Calculated MW**

39125 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat  
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

**Subcellular Localization**

Cytoplasm . Nucleus .

**Tissue Specificity**

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

**Protein Name**

RNA-binding protein Musashi homolog 1

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the N-terminus of human Musashi 1/Msi1 (21-54aa KMFIGGLSWQTTQEGLREYFGQFGEVKECLVMRD), identical to the related mouse and rat sequences.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

**Anti-Musashi 1/Msi1 Picoband Antibody - Protein Information****Name** MSI1**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 (By similarity).

**Cellular Location**

Cytoplasm {ECO:0000250|UniProtKB:Q61474}. Nucleus {ECO:0000250|UniProtKB:Q61474}

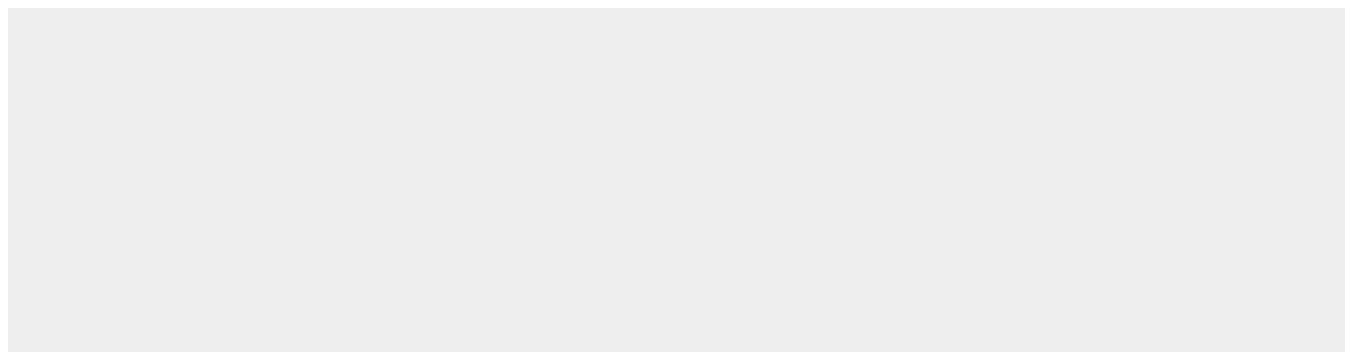
**Tissue Location**

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

**Anti-Musashi 1/Msi1 Picoband Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-Musashi 1/Msi1 Picoband Antibody - Images**

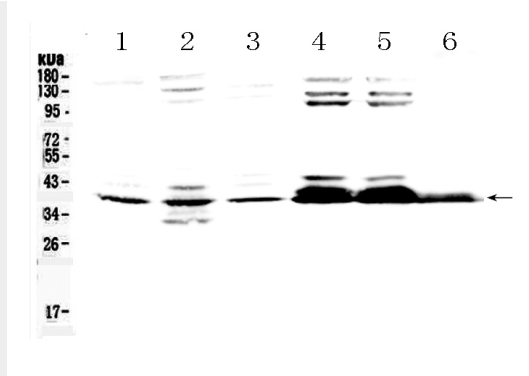


Figure 1. Western blot analysis of Musashi 1/Msi1 using anti- Musashi 1/Msi1 antibody (ABO10316). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat brain tissue lysates, Lane 2: rat testis tissue lysates, Lane 3: mouse brain tissue lysates, Lane 4: 293T whole Cell lysates, Lane 5: 293T whole Cell lysates, Lane 6: HEPG2 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- Musashi 1/Msi1 antigen affinity purified polyclonal antibody (Catalog # ABO10316) at 0.5  $\mu$ g/mL overnight at 4 $^{\circ}$ C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Musashi 1/Msi1 at approximately 39KD. The expected band size for Musashi 1/Msi1 is at 39KD.

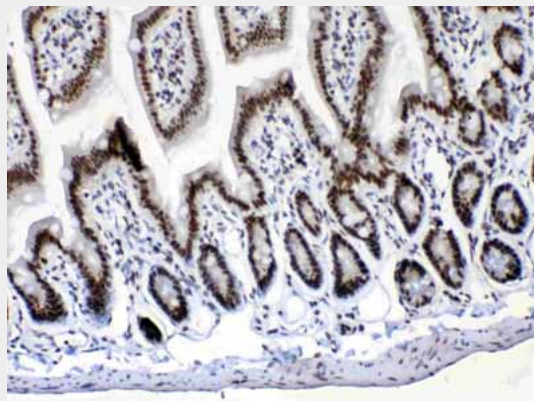


Figure 2. IHC analysis of Musashi 1/Msi1 using anti- Musashi 1/Msi1 antibody (ABO10316). Musashi 1/Msi1 was detected in paraffin-embedded section of mouse intestine tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 $\mu$ g/ml rabbit anti- Musashi 1/Msi1 Antibody (ABO10316) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

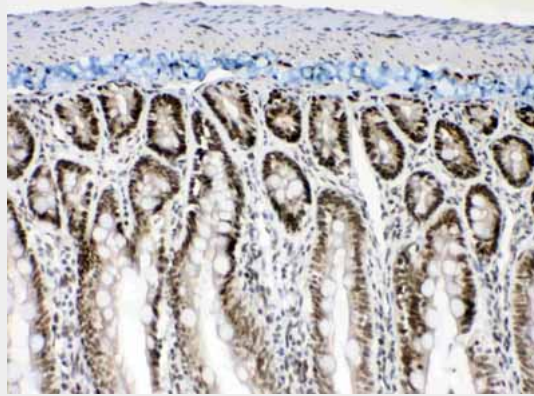


Figure 3. IHC analysis of Musashi 1/Msi1 using anti- Musashi 1/Msi1 antibody (ABO10316).Musashi 1/Msi1 was detected in paraffin-embedded section of rat intestine tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 $\mu$ g/ml rabbit anti- Musashi 1/Msi1 Antibody (ABO10316) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

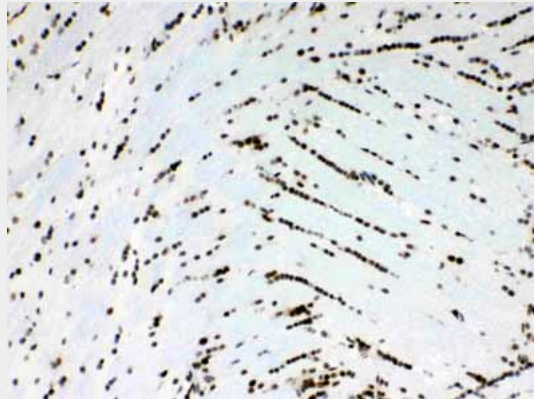


Figure 4. IHC analysis of Musashi 1/Msi1 using anti- Musashi 1/Msi1 antibody (ABO10316).Musashi 1/Msi1 was detected in paraffin-embedded section of rat brain tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 $\mu$ g/ml rabbit anti- Musashi 1/Msi1 Antibody (ABO10316) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

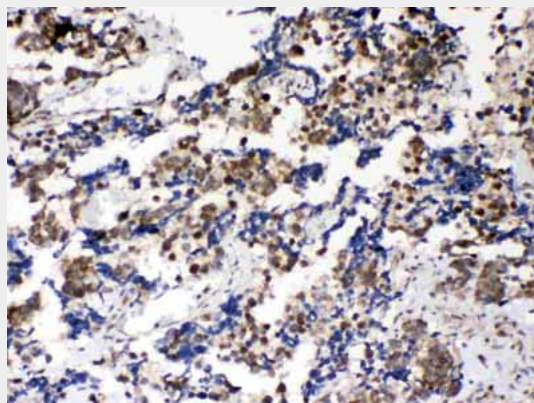


Figure 5. IHC analysis of Musashi 1/Msi1 using anti- Musashi 1/Msi1 antibody (ABO10316).Musashi

1/Msi1 was detected in paraffin-embedded section of human lung cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 $\mu$ g/ml rabbit anti- Musashi 1/Msi1 Antibody (ABO10316) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

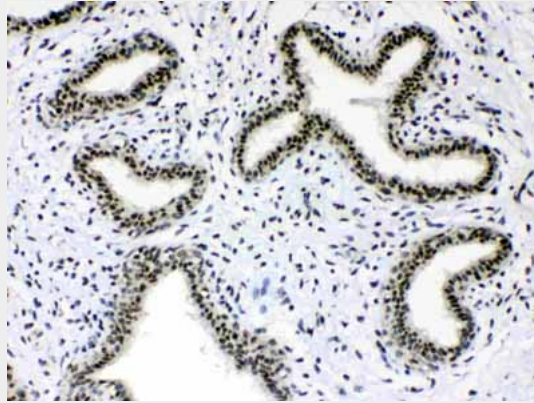


Figure 6. IHC analysis of Musashi 1/Msi1 using anti- Musashi 1/Msi1 antibody (ABO10316).Musashi 1/Msi1 was detected in paraffin-embedded section of human mammary cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 $\mu$ g/ml rabbit anti- Musashi 1/Msi1 Antibody (ABO10316) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

#### **Anti-Musashi 1/Msi1 Picoband Antibody - Background**

RNA-binding protein Musashi homolog 1 is a protein that in humans is encoded by the MSI1 gene. This gene encodes a protein containing two conserved tandem RNA recognition motifs. Similar proteins in other species function as RNA-binding proteins and play central roles in posttranscriptional gene regulation. Expression of this gene has been correlated with the grade of the malignancy and proliferative activity in gliomas and melanomas. A pseudogene for this gene is located on chromosome 11q13.