

# Anti-Musashi 1/Msi1 Picoband Antibody

Catalog # ABO10316

#### Specification

# Anti-Musashi 1/Msi1 Picoband Antibody - Product Information

ApplicationWB, IHC-PPrimary Accession043347HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit lgG polyclonal antibody for RNA-binding protein Musashi homolog 1(MSI1) det

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<br> <br> Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat<br>

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 Na2HPO4, 0.05mg NaN3.

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 Cytomety
- <u>Cell Culture</u>

Anti-Musashi 1/Msi1 Picoband Antibody - Images



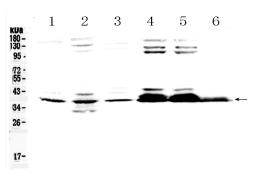


Figure 1. Western blot analysis of Musashi 1/Msi1 using anti- Musashi 1/Msi1 antibody (ABO10316). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 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  $\hat{1}$ /4g/mL overnight at 4ŰC, 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.

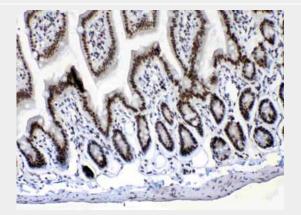


Figure 2. IHC analysis of Musashi 1/Msi1 using anti- Musashi 1/Msi1 antibody (ABO10316).Musashi 1/Msi1 was detected in paraffin-embedded section of mouse intestine tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with  $11^{4}$ g/ml rabbit anti- Musashi 1/Msi1 Antibody (ABO10316) overnight at  $4A^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at  $37A^{\circ}$ C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.



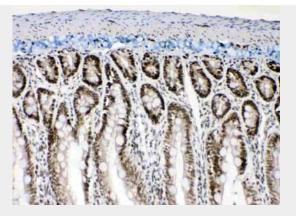


Figure 3. IHC analysis of Musashi 1/Msi1 using anti- Musashi 1/Msi1 antibody (ABO10316).Musashi 1/Msi1 was detected in paraffin-embedded section of rat intestine tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section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

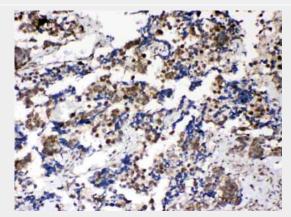


Figure 5. IHC analysis of Musashi 1/Msi1 using anti- Musashi 1/Msi1 antibody (ABO10316).Musashi



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  $1^{1/4}g/ml$  rabbit anti- Musashi 1/Msi1 Antibody (ABO10316) overnight at 4ŰC. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37ŰC. The tissue section was developed using Strepavidin-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  $1\hat{l}_4$ g/ml rabbit anti- Musashi 1/Msi1 Antibody (ABO10316) overnight at 4ŰC. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37ŰC. The tissue section was developed using Strepavidin-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.