

Anti-Musashi 1/Msi1 Picoband Antibody

Catalog # ABO10316

Product Information

Application	WB, IHC-P
Primary Accession	O43347
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.

Additional Information

Gene ID	4440
Other Names	RNA-binding protein Musashi homolog 1, Musashi-1, MSI1
Calculated MW	39125
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5 μ g/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. .
Source	Eukaryota
Protein Name	RNA-binding protein Musashi homolog 1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Na ₃ .
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.
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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

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.

Images

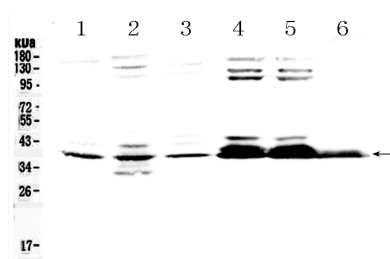


Figure 1. Western blot analysis of Musashi 1/Msi1 using anti- Musashi 1/Msi1 antibody (ABO10316). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane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

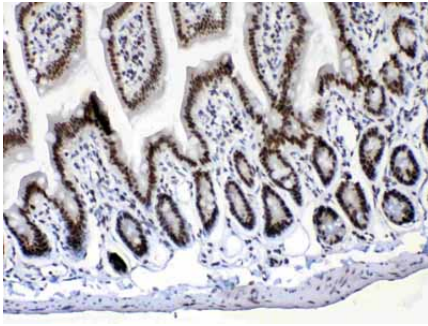


Figure 2. IHC analysis of Musashi 1/Msi1 using anti-Musashi 1/Msi1 antibody (ABO10316).Musashi 1/Msi1 was detected in paraffin-embedded section of mouse intestine tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ 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.

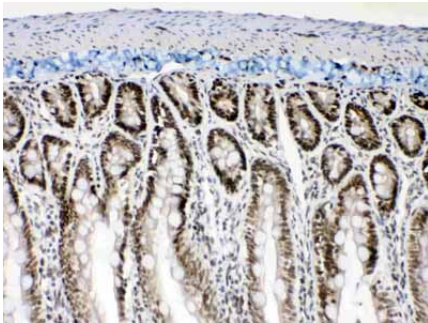


Figure 3. IHC analysis of Musashi 1/Msi1 using anti-Musashi 1/Msi1 antibody (ABO10316).Musashi 1/Msi1 was detected in paraffin-embedded section of rat intestine tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ 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.

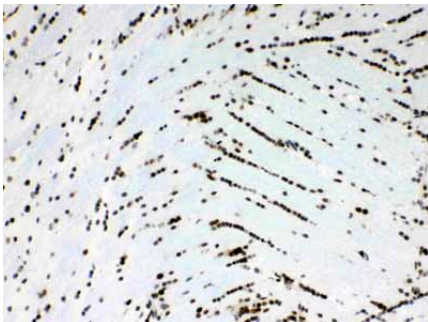


Figure 4. IHC analysis of Musashi 1/Msi1 using anti-Musashi 1/Msi1 antibody (ABO10316).Musashi 1/Msi1 was detected in paraffin-embedded section of rat brain tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ 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.

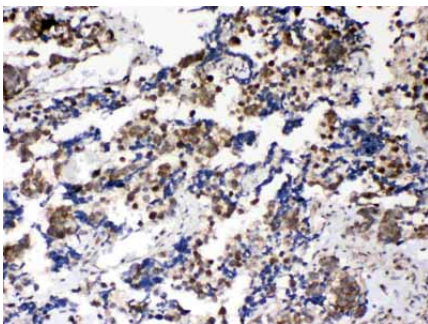
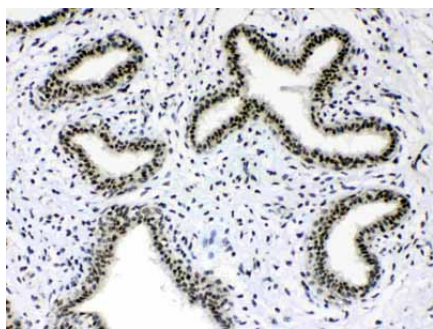


Figure 5. IHC analysis of Musashi 1/Msi1 using anti-Musashi 1/Msi1 antibody (ABO10316).Musashi 1/Msi1 was detected in paraffin-embedded section of human lung cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ 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 μ 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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.