

**MSI2 Antibody**  
Catalog # ASC11325

**Specification**

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**MSI2 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q96DH6</a>
Other Accession	<a href="#">EAW94506</a> , <a href="#">124540</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	MSI2 antibody can be used for detection of MSI2 by Western blot at 1 µg/mL. Antibody can also be used for immunohistochemistry starting at 5 µg/mL and immunocytochemistry starting at 5 µg/mL. For immunofluorescence start at 5 µg/mL.

**MSI2 Antibody - Additional Information**

Gene ID **124540**

**Target/Specificity**

MSI2 antibody was raised against a 15 amino acid synthetic peptide near the amino terminus of human MSI2. <br><br>The immunogen is located within amino acids 30 - 80 of MSI2.

**Reconstitution & Storage**

MSI2 antibody can be stored at 4 °C, stable for one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

**Precautions**

MSI2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**MSI2 Antibody - Protein Information**

**Name** MSI2

**Function**

RNA binding protein that regulates the expression of target mRNAs at the translation level. May play a role in the proliferation and maintenance of stem cells in the central nervous system (By similarity).

**Cellular Location**

Cytoplasm. Note=Associated with polysomes.

**Tissue Location**

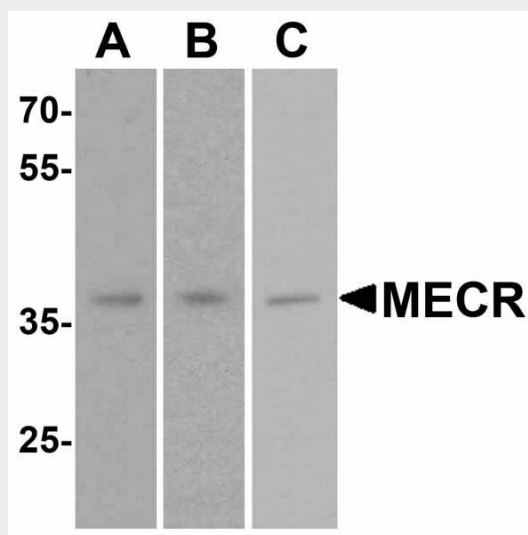
Ubiquitous; detected at low levels.

### MSI2 Antibody - Protocols

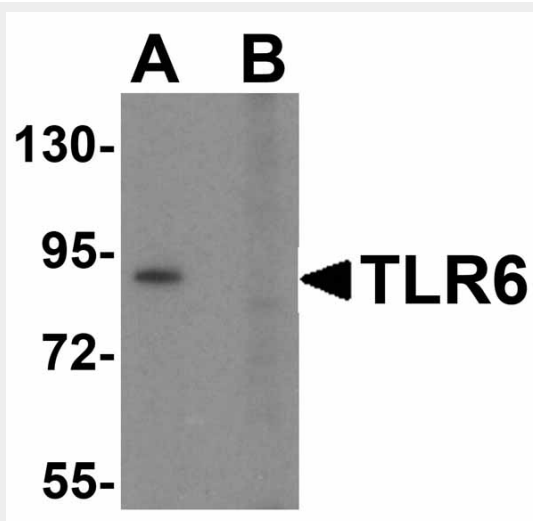
Provided below are standard protocols that you may find useful for product applications.

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

### MSI2 Antibody - Images



Western blot analysis of MECR in (A) human brain tissue, (B) mouse brain tissue, and (C) rat brain tissue lysate with MECR antibody at 1  $\mu\text{g}/\text{mL}$ .



Western blot analysis of TLR6 in Daudi cell lysate with TLR6 antibody at 1 µg/mL in (A) the absence and (B) the presence of blocking peptide.

### **MSI2 Antibody - Background**

MSI2 Antibody: Musashi2 (MSI2) is an RNA-binding protein that is highly expressed in precursor cells in the ventricular and subventricular zones of the developing mammalian CNS. Like the related MSI1, MSI2 has been suggested to be involved stem cell production and maintenance. MSI2 is the predominant MSI protein in hematopoietic stem cells, and its knockdown leads to reduced engraftment and depletion in vivo. Expression levels of MSI2 are elevated in myeloid leukemia cells lines, and MSI2 appears to cooperate with BCR-ABL1 to induce an aggressive leukemia; the level of MSI2 directly correlates with decreased survival in patients. MSI2 negatively regulates the asymmetric cell fate determinant NUMB, suggesting that this signaling pathway may provide future targets for future therapies.

### **MSI2 Antibody - References**

Sakakibara S, Nakamura Y, Stoh H, et al. RNA-binding protein Musashi2: developmentally regulated expression in neuronal precursor cells and subpopulations of neurons in mammalian CNS. *J. Neurosci.* 2001; 21:8091-107

Kharas MG, Lengner CJ, Al-Shahrour F, et al. Musashi-2 regulates normal hematopoiesis and promotes aggressive myeloid leukemia. *Nat. Med.* 2010; 16:903-8

Ito T, Kwon HY, Zimdahl B, et al. Regulation of myeloid leukaemia by the cell-fate determinant Musashi. *Nature* 2010; 466:765-8.

Griner LN and Reuther GW. Aggressive myeloid leukemia formation is directed by the Musashi2/Numb pathway. *Cancer Biol. Ther.* 2010; 10:979-82