

# MSI2 Antibody

Catalog # ASC11325

### Specification

## MSI2 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, IHC-P, IF, ICC, E <u>Q96DH6</u> EAW94506, <u>124540</u> Human, Mouse, Rat Rabbit Polyclonal IgG 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

Target/Specificity

124540

#### **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.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- 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  $1 \mu g/mL$ .





Western blot analysis of TLR6 in Daudi cell lysate with TLR6 antibody at 1  $\mu$ g/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