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#5663

## Musashi-1 (D46A8) Rabbit mAb

**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R	Endogenous	35	Rabbit IgG	#O43347	4440

### Product Usage Information

#### Application

Western Blotting

#### Dilution

1:1000

### Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

### Specificity/Sensitivity

Musashi-1 (D46A8) Rabbit mAb detects endogenous levels of total Musashi-1 protein.

### Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Met190 of human Musashi-1 protein.

### Background

Musashi-1 and Musashi-2 are RNA-binding proteins which play a role in asymmetric cell division of ectodermal precursor cells by regulating the translation of target mRNA. Both family members augment Notch signaling and repress the translation of m-Numb, a protein that positively modulates differentiation of neural stem cells into neurons. Thus, Musashi contributes to the maintenance of neural stem cells (1). While Musashi-1 is frequently used as a marker for proliferating neural precursor cells, it is also expressed in epithelial stem cells including intestinal and mammary gland stem cells (2-4).

### Background References

- Okano, H. et al. (2005) *Exp. Cell Res.* 306, 349-56.
- Sakakibara, S. et al. (1996) *Dev. Biol.* 176, 230-42.
- Potten, C.S. et al. (2003) *Differentiation* 71, 28-41.
- Clarke, R.B. et al. (2005) *Dev. Biol.* 277, 443-56.

### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Western Blot Buffer

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

### Applications Key

**W:** Western Blotting

### Cross-Reactivity Key

**H:** Human **M:** Mouse **R:** Rat

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