

DESCRIPTION

| | |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Species Reactivity | Human/Mouse/Rat |
| Specificity | Detects human Musashi-1 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human Musashi-2 is observed. |
| Source | Polyclonal Goat IgG |
| Purification | Antigen Affinity-purified |
| Immunogen | <i>E. coli</i> -derived recombinant human Musashi-1 Met1-His362 Accession # O43347 |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS. |

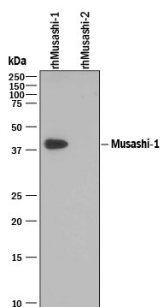
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

| | Recommended Concentration | Sample |
|-----------------------------|----------------------------------|---------------|
| Western Blot | 0.1 µg/mL | See Below |
| Immunocytochemistry | 5-15 µg/mL | See Below |
| Immunohistochemistry | 1-15 µg/mL | See Below |

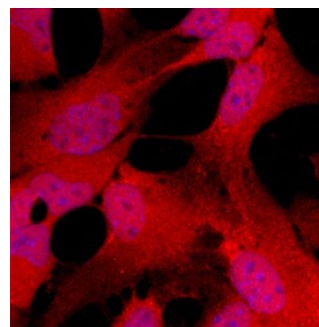
DATA

Western Blot



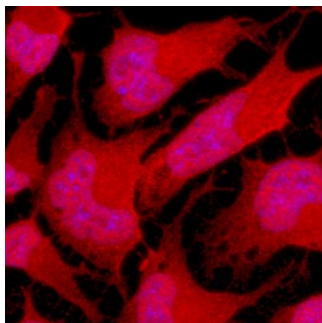
Detection of Recombinant Human Musashi-1 by Western Blot. Western blot shows 25 ng of Recombinant Human Musashi-1 and Recombinant Human Musashi-2. PVDF Membrane was probed with 0.1 µg/mL of Goat Anti-Human/Mouse/Rat Musashi-1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2628) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for Musashi-1 at approximately 39 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 3](#).

Immunocytochemistry



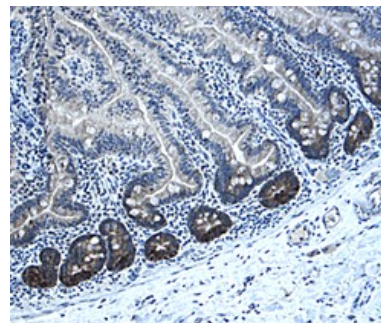
Musashi-1 in Mouse Cortical Stem Cells. Musashi-1 was detected in immersion fixed undifferentiated mouse cortical stem cells using Goat Anti-Human/Mouse/Rat Musashi-1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2628) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to nuclei and cytoplasm. View our protocol for [Fluorescent ICC Staining of Stem Cells on Coverslips](#).

Immunocytochemistry



Musashi-1 in Rat Cortical Stem Cells. Musashi-1 was detected in immersion fixed undifferentiated rat cortical stem cells using Goat Anti-Human/Mouse/Rat Musashi-1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2628) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to nuclei and cytoplasm. View our protocol for [Fluorescent ICC Staining of Stem Cells on Coverslips](#).

Immunohistochemistry



Musashi-1 in Human Intestine. Musashi-1 was detected in immersion fixed paraffin-embedded sections of human intestine using 1 µg/mL Goat Anti-Human/Mouse/Rat Musashi-1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2628) overnight at 4 °C. Tissue was stained with the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific labeling was localized to the cytoplasm of epithelial cells in intestinal glands. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

| | |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reconstitution | Reconstitute at 0.2 mg/mL in sterile PBS. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

BACKGROUND

Musashi-1 is an RNA-binding protein that is expressed in the developing central nervous system. Expression is highest in proliferating multipotent neural precursor cells and decreases during neuronal differentiation (1, 2).

References:

1. Kaneko, Y. *et al.* (2000) *Dev. Neurosci.* **22**:139.
2. Kanemura, Y. *et al.* (2002) *Meth. Mol. Biol.* **198**:273.