

# HMBOX1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP56928

### Specification

# HMBOX1 Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW WB, IHC-P, IHC-F, IF, ICC <u>O6NT76</u> Rat, Pig, Dog, Bovine Rabbit Polyclonal 47278

## **HMBOX1** Polyclonal Antibody - Additional Information

Gene ID 79618

**Other Names** 

Homeobox-containing protein 1, Homeobox telomere-binding protein 1, Telomere-associated homeobox-containing protein 1, HMBOX1 {ECO:0000303|PubMed:16825764}

Dilution

<span class ="dilution\_WB">WB~~1:1000</span><br \><span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \><span class ="dilution\_IHC-F">IHC-F~~N/A</span><br \><span class ="dilution\_IF">IF~~1:50~200</span><br \><span class ="dilution\_ICC">ICC~~N/A</span>

Format 0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

**Storage** Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

### **HMBOX1** Polyclonal Antibody - Protein Information

Name HMBOX1 {ECO:0000303|PubMed:16825764}

Function

Binds directly to 5'-TTAGGG-3' repeats in telomeric DNA (PubMed:<a

href="http://www.uniprot.org/citations/23685356" target="\_blank">23685356</a>, PubMed:<a href="http://www.uniprot.org/citations/23813958" target="\_blank">23813958</a>). Associates with the telomerase complex at sites of active telomere processing and positively regulates telomere elongation (PubMed:<a href="http://www.uniprot.org/citations/23685356" target="\_blank">23685356" target="\_blank">23685356" target="\_blank">23685356</a>). Associates with the telomerase complex at sites of active telomere processing and positively regulates telomere elongation (PubMed:<a href="http://www.uniprot.org/citations/23685356" target="\_blank">23685356" target="\_blank">23685356</a>). Important for TERT binding to chromatin, indicating a role in recruitment of the telomerase complex to telomeres (By similarity). Also plays a role in the alternative lengthening of telomeres (ALT) pathway in telomerase-negative cells where it promotes formation and/or maintenance of ALT-associated promyelocytic leukemia bodies (APBs)



(PubMed:<a href="http://www.uniprot.org/citations/23813958" target="\_blank">23813958</a>). Enhances formation of telomere C-circles in ALT cells, suggesting a possible role in telomere recombination (PubMed:<a href="http://www.uniprot.org/citations/23813958" target="\_blank">23813958</a>). Might also be involved in the DNA damage response at telomeres (PubMed:<a href="http://www.uniprot.org/citations/23813958" target="\_blank">23813958</a>).

#### **Cellular Location**

Nucleus. Cytoplasm. Chromosome, telomere. Nucleus, Cajal body. Nucleus, PML body. Note=Predominantly detected in cytoplasm (PubMed:16825764, PubMed:19728927). Localizes in a dynamic manner to actively processed telomeres (PubMed:23685356). Localizes to the periphery of Cajal bodies (PubMed:23685356). Associates with PML nuclear bodies in telomerase-negative cells (PubMed:23813958)

#### **Tissue Location**

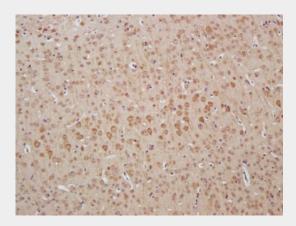
Ubiquitous. Detected in pancreas, brain, spleen, placenta, prostate, thymus, liver, heart, bone marrow, skeletal muscle, stomach, uterus, testis, kidney, ovary, colon, lung, cardiac muscle and thyroid gland.

### HMBOX1 Polyclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- <u>Flow Cytomety</u>
- <u>Cell Culture</u>

#### HMBOX1 Polyclonal Antibody - Images



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (HMBOX1) Polyclonal Antibody, Unconjugated (bs-18047R) at 1:400 overnight at 4°C, followed by a conjugated secondary antibody (sp-0023) for 20 minutes and DAB staining.