

HMBOX1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP18472c

Specification

HMBOX1 Antibody (Center) - Product Information

Application WB,E
Primary Accession Q6NT76

Other Accession <u>Q8BJA3</u>, <u>NP_001129198.1</u>

Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 47278
Antigen Region 197-223

HMBOX1 Antibody (Center) - Additional Information

Gene ID 79618

Other Names

Homeobox-containing protein 1, HMBOX1

Target/Specificity

This HMBOX1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 197-223 amino acids from the Central region of human HMBOX1.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

HMBOX1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

HMBOX1 Antibody (Center) - Protein Information

Name HMBOX1 {ECO:0000303|PubMed:16825764}

Function Binds directly to 5'-TTAGGG-3' repeats in telomeric DNA (PubMed: <u>23813958</u>, PubMed: <u>23685356</u>). Associates with the telomerase complex at sites of active telomere processing



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and positively regulates telomere elongation (PubMed: 23685356). 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: 23813958). Enhances formation of telomere C-circles in ALT cells, suggesting a possible role in telomere recombination (PubMed: 23813958). Might also be involved in the DNA damage response at telomeres (PubMed: 23813958).

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

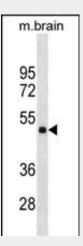
Ubiquitous. Detected in pancreas, brain, spleen, placenta, prostate, thymus, liver, heart, bone marrow, skeletal muscle, stomach, uterus, testis, kidney, ovary, colon, lung, cardiac muscle and thyroid gland.

HMBOX1 Antibody (Center) - Protocols

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

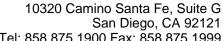
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

HMBOX1 Antibody (Center) - Images



HMBOX1 Antibody (Center) (Cat. #AP18472c) western blot analysis in mouse brain tissue lysates (35ug/lane). This demonstrates the HMBOX1 antibody detected the HMBOX1 protein (arrow).

HMBOX1 Antibody (Center) - Background





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Transcription factor. Isoform 1 acts as a transcriptional repressor. Isoform 4 has very low activity as a transcriptional repressor.

HMBOX1 Antibody (Center) - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010): Zhang, M., et al. Mol. Biol. Rep. 37(6):2767-2772(2010) Dai, J., et al. Cell. Mol. Immunol. 6(4):261-268(2009) De Marco, A., et al. Retrovirology 5, 98 (2008): Chen, S., et al. Cytogenet. Genome Res. 114(2):131-136(2006)