

HMBOX1 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP18472c**Specification**

HMBOX1 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [Q6NT76](#)**HMBOX1 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 79618**Other Names**

Homeobox-containing protein 1, HMBOX1

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

HMBOX1 Antibody (Center) Blocking Peptide - Protein Information**Name** HMBOX1 {ECO:0000303|PubMed:16825764}**Function**

Binds directly to 5'-TTAGGG-3' repeats in telomeric DNA (PubMed:23813958, PubMed:23685356). Associates with the telomerase complex at sites of active telomere processing 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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

HMBOX1 Antibody (Center) Blocking Peptide - Images**HMBOX1 Antibody (Center) Blocking Peptide - Background**

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

HMBOX1 Antibody (Center) Blocking Peptide - 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)