

**Mouse Cbx7 Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP20840c**

**Specification**

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**Mouse Cbx7 Antibody (C-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">Q8VDS3</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	18109

**Mouse Cbx7 Antibody (C-term) - Additional Information**

**Gene ID** 52609

**Other Names**

Chromobox protein homolog 7, Cbx7, D15Ert417e

**Target/Specificity**

This Mouse Cbx7 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 144-178 amino acids from the C-terminal region of human Mouse Cbx7.

**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**

Mouse Cbx7 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**Mouse Cbx7 Antibody (C-term) - Protein Information**

**Name** Cbx7

**Synonyms** D15Ert417e

**Function** Component of a Polycomb group (PcG) multiprotein PRC1-like complex, a complex class required to maintain the transcriptionally repressive state of many genes, including Hox genes,

throughout development (PubMed:[16537902](#), PubMed:[22226355](#)). PcG PRC1 complex acts via chromatin remodeling and modification of histones; it mediates monoubiquitination of histone H2A 'Lys-119', rendering chromatin heritably changed in its expressibility. Promotes histone H3 trimethylation at 'Lys-9' (H3K9me3) (By similarity). Binds to histone H3 trimethylated at 'Lys-9' (H3K9me3) or at 'Lys-27' (H3K27me3) (PubMed:[16537902](#), PubMed:[22226355](#)). Trimethylation at 'Lys-27' (H3K27me3) is important for chromatin recruitment (PubMed:[22226355](#), PubMed:[16537902](#)). May possibly also bind trimethylated lysine residues in other proteins (in vitro) (PubMed:[16537902](#)). Binds non-coding, single-stranded RNA and double-stranded RNA (PubMed:[20541999](#), PubMed:[16537902](#)). Plays a role in the timely repression of differentiation-specific genes in pluripotent embryonic stem cells to maintain the undifferentiated state (PubMed:[22226355](#)). Regulator of cellular lifespan by maintaining the repression of CDKN2A, but not by inducing telomerase activity (PubMed:[14647293](#)).

### Cellular Location

Nucleus. Chromosome Note=Requires trimethylation at 'Lys-27' (H3K27me3) for the localization to chromatin (PubMed:[22226355](#)). Localizes to facultative heterochromatin and to the inactivated X chromosome in females (PubMed:[16537902](#)).

### Tissue Location

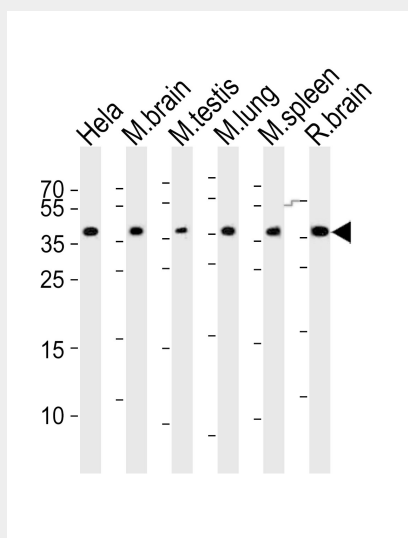
Expressed in embryonic stem cells.

## Mouse Cbx7 Antibody (C-term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Mouse Cbx7 Antibody (C-term) - Images



Western blot analysis of lysates from HeLa cell line, mouse brain, mouse testis, mouse lung,

mouse spleen, rat brain tissue (from left to right), using Mouse Cbx7 Antibody (C-term)(Cat. #AP20840c). AP20840c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.

#### **Mouse Cbx7 Antibody (C-term) - Background**

Component of a Polycomb group (PcG) multiprotein PRC1- like complex, a complex class required to maintain the transcriptionally repressive state of many genes, including Hox genes, throughout development. PcG PRC1 complex acts via chromatin remodeling and modification of histones; it mediates monoubiquitination of histone H2A 'Lys-119', rendering chromatin heritably changed in its expressibility. Promotes histone H3 trimethylation at 'Lys-9' (H3K9me3). Binds to histone H3 trimethylated 'Lys-9' (H3K9me3) or at 'Lys-27' (H3K27me3). May possibly also bind trimethylated lysine residues in other proteins (in vitro). Binds non-coding, single-stranded RNA. Regulator of cellular lifespan by maintaining the repression of CDKN2A, but not by inducing telomerase activity.

#### **Mouse Cbx7 Antibody (C-term) - References**

Gil J.,et al.Nat. Cell Biol. 6:67-72(2004).  
Bernstein E.,et al.Mol. Cell. Biol. 26:2560-2569(2006).  
Yap K.L.,et al.Mol. Cell 38:662-674(2010).