

Mouse Cbx7 Blocking Peptide (C-term)
Synthetic peptide
Catalog # BP20840c**Specification**

Mouse Cbx7 Blocking Peptide (C-term) - Product InformationPrimary Accession [Q8VDS3](#)**Mouse Cbx7 Blocking Peptide (C-term) - Additional Information****Gene ID** 52609**Other Names**

Chromobox protein homolog 7, Cbx7, D15Ert417e

Target/Specificity

The synthetic peptide sequence is selected from aa 144-158 of HUMAN Cbx7

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.

Mouse Cbx7 Blocking Peptide (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](http://www.uniprot.org/citations/16537902), PubMed: [22226355](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/16537902), PubMed: [22226355](http://www.uniprot.org/citations/22226355)). Trimethylation at 'Lys-27' (H3K27me3) is important for chromatin recruitment (PubMed: [22226355](http://www.uniprot.org/citations/22226355), PubMed: [16537902](http://www.uniprot.org/citations/16537902)).

target="_blank">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 Blocking Peptide (C-term) - Protocols

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

- [Blocking Peptides](#)

Mouse Cbx7 Blocking Peptide (C-term) - Images

Mouse Cbx7 Blocking Peptide (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 Blocking Peptide (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).