

Product datasheet for MC207495

Cbx7 (NM 144811) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Cbx7 (NM_144811) Mouse Untagged Clone

Tag: Tag Free Symbol: Cbx7

Synonyms: 1600014J01Rik; Al851678; D15Ertd417e

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >NCBI ORF sequence for NM_144811, the custom clone sequence may differ by one or more

nucleotides

ATGGAGCTGTCAGCCATAGGCGAGCAGGTGTTTGCGGTGGAGAGCATCCGGAAGAAGCGCGTGCGGAAGGGCAAAGTTGAATATCTGGTGAAGTGGAAAGGATGGCCCCCCAAGTATAGCACCTGGGAGCCAGAGGAGCACATCTTGGACCCTCGCCTTGTCATGGCCTACGAGGAGAAGAGGAGGAGAGACCGAGCCTCGGGGTATAGGAAGAGAGGTCCGAAACCCAGGCGGCTTCTGCTACAGGAGTCAGCAGCCCCAGACGTTGTGCAGACCCCCGGAGACTGGGAGCCTATGGAGCAAGCCCCCGAGAGGAGAGCAGACCTGACCAATGGGCCGCCTCCCTGGACACCCCACCCTCAAGTGAAGTTACCGTGACATCACCGCCAACTCCGTCACCGTCACC

TTCCGCGAGGCTCAAGCCGCCGAGGGCTTCTTCCGAGACCGCAACGAGAAGCTGTGA

Restriction Sites: Sgfl-Mlul
ACCN: NM_144811
Insert Size: 477 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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Cytogenetics:

Reconstitution Method:

- 1. Centrifuge at 5,000xg for 5min.
- 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
- 3. Close the tube and incubate for 10 minutes at room temperature.
- 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
- 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: <u>BC021398</u>, <u>AAH21398</u>

15 37.85 cM

RefSeq Size:1520 bpRefSeq ORF:477 bpLocus ID:52609UniProt ID:Q8VDS3

Gene Summary: 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).[UniProtKB/Swiss-Prot Function]