

Product datasheet for **SC117841**

CBX4 (NM_003655) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CBX4 (NM_003655) Human Untagged Clone
Tag:	Tag Free
Symbol:	CBX4
Synonyms:	NBP16; PC2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC117841 sequence for NM_003655 edited (data generated by NextGen Sequencing)

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ATGGAGCTGCCAGCTGTTGGCGAGCACGTCTTCGCGGTGGAGAGCATCGAGAAGAAGCGG
ATCCGCAAGGGCAGAGTGGAGTATCTGGTGAATGGAGAGGCTGGTCGCCAAATATAAC
ACGTGGGAACCGGAGGAGAACATCTGGACCCAGGCTGCTGATCGCCTCCAGAACAGG
GAACGGCAGGAGCAGCTGATGGGATATCGGAAGAGAGGGCCGAAGCCAAACCGTAGTG
GTGCAGTGCCTACCTTTGCCCGTCGTTCCAATGTCCTGACCCGGCCTCCAGGACTCCTCC
ACTGACAACCGTGCCAAGCTGGATTTGGGCGCGCAGGGGAAGGGCCAGGGGCATCAGTAC
GAGCTCAACAGCAAGAAGCACCACCAGTACCAGCCGACAGCAAGGAGCGGGCGGCAAG
CCCCCGCCCGGGCAAGAGCGGCAAGTACTACTACCAGCTCAACAGCAAGAAGCACCAC
CCCTACCAGCCGACCCAAAATGTACGACCTGCAGTACCAGGGCGGCCACAAGGAGGCG
CCCAGCCCCACCTGCCCGGACCTGGGGGCAAGAGCCACCCGCCGACAAGTGGGCGCAA
GGTGGCGGGGCAAAAGGCTACCTGGGGGCGGTGAAGCCCTGGCCGGTGCGGCGGTGCT
CCAGGCAAAGGCTCCGAGAAGGGCCCCCAACGAATGATGCCGGCCCCAAAGAGGCT
GTGACGGGCAACGGGATTGGGGGCAAGATGAAGATAGTCAAGAACAAGAACAAGAACGGA
CGCATCGTGATCGTGATGAGCAAATACATGGAGAACGGCATGCAGCGGTTGAAGTCAAG
TCCGGCGAGGTGGCAGAGGGGGAGGCTCGCTCCCCAGCCACAAGAAGCGGGCAGCCGAC
GAGCGCCACCCTCCTGCCGACAGGACTTTTAAAAGGCGGGCGGCGCAGAGGAGAAGAAG
GTGGAGGCGCCGCCAAGAGGAGGGAGGAGGAGGTGTCCGGGGTTAGCGATCCCGAGCCC
CAGGATGCCGGCTCCCGCAAGCTGTCCCGACCAAGGAGGCTTTGGAGAGCAGCCCTG
CAGCTCACCACCAAGCCCGACCTGCTTGCTGGGACCCGGCCCGAACACGCACCCGCC
TCACACCACCCGCACCCGCACCCCATCACCACCACCACCACCACCACCACCACCACCAC
GCCGTGCGCCTGAATCTCTCCACGTGCGCAAGCGTGCCTCTCCGAGACCCACGGCGAG
CGCGAGCCCTGCAAGAAGCGGCTGACTGCGCGCAGCATCAGCACCCCCACCTGCCTGGGG
GGCAGCCAGCCGCTGAGCGCCCGGCGACCTGCCACCAGCCGCGCCCTCCCGCAGCCC
GAGGTCATCCTGTAGACTCAGACCTGGATGAACCCATAGACTTGCGCTGCGTCAAGACG
CGCAGCGAGGCCGGGAGCCGCCAGCTCCCTCCAGGTGAAGCCCGAGACACCGGCGTGC
GCGGCGGTGGCGTNNNNNNNNNAGCGGCNCCCACNNNNNNNNGGAGAAGCCTCCAGCC
GAGGCCCAGGACGAACCTGCAGAGTCGCTGAGCGAGTTCAAGCCCTTCTTTGGGAATATA
ATTATCACCGACGTCACCGGAACTGCCTCACCCTTACTTTCAAGGAGTACGTGACGGTG
TAG
    
```

Clone variation with respect to NM_003655.2
 1515 g=>n;1516 g=>n;1517 c=>n;1518 g=>n;1519 g=>n;1520 c=>n;1521 g=>n;1522 g=>n;1523
 c=>n;1530 a=>n;1537 a=>n;1538 c=>n;1539 g=>n;1540 a=>n;1541 c=>n;1542 g=>n;1543
 g=>n;1544 c=>n

5' Read Nucleotide Sequence:

```
>OriGene 5' read for NM_003655 unedited
TACTATAGGGCGGCCGGAATTCGGCACGAGGGCGAGCCGGGAGCCGGGGCGGGCGCGGG
CAGCGGCGGGCCGGCCGGGCTGTGCGGGGCGAGCGGGCGGGCGGGGGCGCTTCGGC
CGGGGCGGCAGCTGGGCGCCGGCGGGAGCTAGCAGCGTCTGCAGCCGCGCCGGCCGACG
CGCCCCGGCGCCTCCGGCTCGGCCATGGAGCTGCCAGCTGTTGGCGAGCACGTCTTCG
GGTGGAGAGCATCGAGAAGAAGCGGATCCGCAAGGGCAGAGTGGAGTATCTGGTAAATG
GAGAGGCTGGTCGCCAAATATAACACGTGGGAACCGGAGGAGAACATCCTGGACCCGAG
GCTGCTGATCGCCTTCCAGAACAGGGAACGGCAGGAGCAGCTGATGGGATATCGGAAGAG
AGGGCCGAAGCCCAAACCGCTAGTGGTGCAAGTGCCTACCTTTGCCCGTCGTTCCAAATGT
CCTGACCGGCCTCCAGGACTCCTCCACTGACAACCGTGCCAAGCTGGGATTGGGCGCGCA
GGGGGAAGGGCCAGGGGCATCAGTACGAGCTCACAGCAGAAACACCCAGTACAGCCGCA
CAGAGGAGCGGGCGCAAGCCCCGCGCCGAGAGCGGCAGTCTACTACAGCTCACAGCA
GAGCACACCCCTACAGCCGACCCAAATGACGACTGCAGACCAGGCGGCCACAGAGGGCCA
GCCACTGCCGGACTTGGGGCAAGACCACCGCCGACAGAGGCGCAGGGGGGGGGCAAG
GCTCTGGGGGCGAAAACCCCGGGGGGGGGGGCTCAGAAGGCTCCAAAAGCCCCCCC
GGAAGACCCGGCCAAAAGGTTGACGCCACGAATGGGGCAAAATAATCTCCAAAACAAA
CAGCCTCTTCTAAACCAATCAGAACGCTTCGCGGGGTAACCCCG
```

3' Read Nucleotide Sequence:

```
>OriGene 3' read for NM_003655 unedited
CCGCAATCTANAGTCGAGTTTTTTTTTTTTTTTTTTTTTCAACATCTCCATTTAATATTT
ACATTCAGCAGGTAATAGTTGGAAGCTTATAGTTTAGACATTTCTAGTAGCAGCAGTTT
CTAGAGAGCTCGTGTAGCCTTTTAACTTTTTTTTTTTTTTTTTTTTGCACATAAAAA
CAAGACATCCATGTGTACAGTATCAAAAAATATATACCAAGTTACTGGTATTGCAGTTC
GGGGAAGGGGAAAAAAGGGGAAAAAATGAAATCAACCGAAATACTGGATGGAGGGGAAAA
AAGGTCAAAAAAATAGTTGGTCTGATATAGAATATAACATGATCTAGAGGAACTCCA
TAAATCTAGGTTTTTATATTTCAATATATAAATCCCTACAATAAATATATATATAGCAG
CCCGAAGGGGGGGGTCGGGCCTTTTGGAGCTCAAACAATACATTTCAATAATAACACCAC
GTACAAACGGGAGTAGAGTCAGCACTTGACAAGTTAGCACGGTTAAAATATAACTAGA
ACTCTGAGGCCGGGCGCAGAGCTGCCCTGTCCGTTCCGGGGTCCATCTCCACCGGGGAAG
GGCAGGAAAGGGGACCCCGCCGGCACCAGCGTGAAGGGGCTCCCCCAGGTCGACA
GCCGCGCAGGGGAACATGTTTACCTCCGCTCCGGGCTCCTCACCCCTGGGGGCCAGCC
TGGGTCTCTCCCGTTTGGCGTTTGAAGAGGGGACCCCGGAGGGCCAGGGGCT
ATCTCCCCGCCCCCTGCGGGAATGGGCGTTTCCCTTCCAAGCCCTCCGGGTTACACCG
GACGTAATCTTGAAGCACAGGGGAAGGCTCCTGGGCGCCCTGCGTGCAAACTTTTTT
CCAAAAGAGGCTTGACACTCCCACCGCTTGGGGTCTCCTGCGCCTGGCGGAGCTTCC
CCCGCGGCGNCGGGCCTATCCCCCTCCACTCCCGT
```

Restriction Sites:

NotI-NotI

ACCN:

NM_003655

Insert Size:

2740 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

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).

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: [NM_003655.2](#), [NP_003646.2](#)

RefSeq Size: 2655 bp

RefSeq ORF: 1683 bp

Locus ID: 8535

UniProt ID: [O00257](#)

Cytogenetics: 17q25.3

Domains: CHROMO

Protein Families: Druggable Genome, Transcription Factors

Gene Summary: E3 SUMO-protein ligase which facilitates SUMO1 conjugation by UBE2I (PubMed:12679040). Involved in the sumoylation of HNRNPK, a p53/TP53 transcriptional coactivator, hence indirectly regulates p53/TP53 transcriptional activation resulting in p21/CDKN1A expression. Monosumoylates ZNF131 (PubMed:22825850).[UniProtKB/Swiss-Prot Function]