

## Product datasheet for **SC305052**

### CTBP2 (NM\_022802) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CTBP2 (NM_022802) Human Untagged Clone
Tag:	Tag Free
Symbol:	CTBP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**Fully Sequenced ORF:**

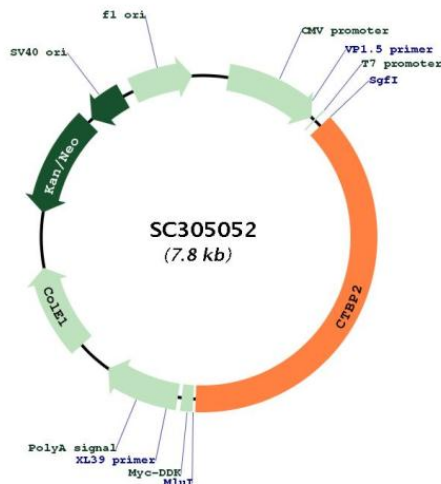
>SC305052 representing NM\_022802.  
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

```

GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGGATCGCC
ATGCCAGTCCCAGCAGGCATATAAATATTGGTCGTTCTCAGAGCTGGGATGCTGCTGGGTGGTACGAG
GGCCCCGGGAGAACGCCGAGTCCCTGCGGCCTCTGGGGAGGAGAAGCTCCCTGACGTATGGCACAGCA
GAGGGGACTTGGTTTGGCCAAACCACCGACCACAGGACGCTGCCCTGCCCGTGGCCGCCGAGCCCTAC
CTGTACCGGGAGGCCGTTTATAACTCAGTGGCTGCAAGAAAGGGGTCTACTCCTGACTTCACCTTCTAC
GACAGCAGACAGGCAGTGATGTCTGGTCGACGCCCTGCTGCCACGGGAGTACTACAGTGATCCGTCT
GGAGCTGTAGGGTACCCAAAGAGCCTCCCTCTATCGGGACCCAGGAGTACGCCGGCCGGTCCCCAGC
TACGGAGTGCTTGGCAGCAGAACGTATGGGATCCAATGCAAGGCCGGTACCTGCCCTGCAGGACGCC
GGTCACCTGTACCGGGATCCTGGAGGTAATGATCCCTCAGGGCGGCAGACACAGAGCAGGGCTGCA
TCTCCCGGGCGGTATGGACGGGAGCAGCCGACACCAGGTATGGGGCGGAGGTGCCTGCCTACCCCTC
AGCCAGGTCTTACGCGACATCAGCGAAAGACCCATTGACCTGCCCTGCCAGACAGGTGGCCCCGAGC
TGCTGTGGTGTGGACCCAGTTCAGCTGCTGCCCCGAAGGCAGCACAGGGGTGGCCCCAGGGGCCCTG
AATCGTGGCTACGGGCCCTGCCCGGAAAGCATCCCATCCAAGATGGCTTACGAGACTTACGAAGCTGAC
CTGTCCACCTTCCAGGGTCTGGTGGCAAGAGGACCGTGCCTCCCTGAGTTCCTGGCCTTCTGCGGGCG
GAGGGGCTGGCAGAGGCCACGCTGGGAGCCCTACTGCAGCAGGGCTTGGACTCCCCGGCCGTCTGGCT
ACCCTGGAGGACGCGGATATCAAGTCTGTGCGACCCAACCTGGGCCAGGCCCGTGTCTGAGCCGCTG
GCCAATAGCTGCAGGACCGAAATGCAGCTGCGGAGGCAGGACCGGGGGGCCCGTGCCTCCCGGGCGCGG
TCCAGCAGCTTACGCCACCGAAGCGAAGTGCCTCATGGTACTTGGCTTCTCTGGGCGCTGCGGCTCCT
CTGCAGACAGCATCCCCCGAGCTGGAGACCCGGCTCGCCGTCCCTCAGCGCACCATCTCAGCACTC
CTGGAGACGGCAGCCACCTATTCTGCCCTGGCGTGGGACCCATGCCCCACACTTCCCTCCAATCC
GGGTACAGCTCTCCACCCCTTGCGCCCTGACAGCGCGTCTGAGCCACAGTACCCCTGCAGGCAGGG
GTGGCCTTACTAACCAGGGGCCCTCAAACCCCTTACCCAGGCCCCAGAACAGCCTACTCCACGGCA
TACACGGTGCCATGGAGCTGCTAAAGAGGGAGCGCAACGTGGCCGCTCTCCGCTGCCAGCCCTCAC
GGCAGCCCCAGGTCTTGGGAAGCCAGGTGCACCCCTGGGGCCATCCACCCTGCCGCGGCCAGCCAG
AGCCTCCACACGCCTCACTACCGTACCAGAAGTGGCCCGGCACAGGGGCACCCATCATCGTGCC
ACCATGCTTGACCAGAACCAAGTATCCGCCCCAGATCATGAACGGCCCTGCACCCCGCCCTCTG
GTGGCGTGTGGACGGCCGACTGCACTGTGGAGATGCCATCCTGAAGGACCTGGCCACTGTGGCC
TTCTGTGACGCGAGTGCAGCAGGAAATCCACGAGAAGTTCATAACGAAGCCGTGGGCGCCATGATG
TACCACACCATCACCCCTACCAGGGAGGACCTGGAGAAGTTCAAGGCCCTGAGAGTGATCGTGCGGATA
GGCAGTGGCTATGACAACGTGGACATCAAGGCTGCCGGCGAGCTCGGAATTGCCGTGTGCAACATCCCG
TCTGCAGCCGTGGAAGAGACAGCGGACTTACCATCTGCCACATCCTCAACCTGTACCGGAGGAACAG
TGGCTGTACAGGCAGTGCGGGAAGGCACGCGGGTTTACAGCGTGGAGCAGATCCGCGAGGTGGCCTCG
GGAGCGGCCCGCATCCGTGGGGAGACGCTGGGCCTCATTGGCTTGGTTCGACGGGGCAGGCGGTGCA
GTTTCGAGCCAAGGCCCTTGGATTACGCGTCATATTTATGACCCCTACTGCAGGATGGGATCGAGCGG
TCCCTGGGCGTGCAGAGGGTCTACACCCTGCAGGATTTGCTGTATCAGAGCGACTGCGTCTCCTTGAC
TGCAATCTCAACGAACATAACCACCACCTCATCAATGACTTTACCATAAAGCAGATGAGGCAGGGAGCA
TTCTTGTGAACGCAGCCGTGGCGGCCTGGTGGACGAGAAAGCCTTAGCACAAGCCCTCAAGGAGGGC
AGGATACGAGGGGCGAGCCCTCGACGTGCATGAGTACAGAGCCCTTACGCTTGTGCTCAGGGTCCGTTGAAA
GATGCCCGAATCTCATCTGCACTCCTCACACTGCCTGGTACAGTGAGCAGGCGTCACTGGAGATGAGG
GAGGCAGTGCCACCGAGATCCGCCGAGCCATCACAGTGCATCCAGAAAGCTTAAGAAATTGTGTG
AACAAAGGAATCTTTGTACATCAGCGCCTTGGTCAAGTATAGACCAGCAAGCAATTCATCTGAGCTC
AATGGTGCCACATACAGATATCCGCCAGGCATCGTGGGTGTGGCTCCAGGAGGACTTCTGCAGCCATG
GAAGGGATCATCCCTGGAGGCATCCAGTACTACAACCTCCCGACAGTGGCACATCTTCCCAAGCG
CCCTCTCCAACAGCCACAAAACACGGGACAATCGAGAGCACCCCAACGAGCAATAG
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
  
```

**Restriction Sites:**

Sgfl-MluI

**Plasmid Map:**


**ACCN:** NM\_022802

**Insert Size:** 2958 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).

**OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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\\_022802.2](#)

**RefSeq Size:** 4752 bp

**RefSeq ORF:** 2958 bp

**Locus ID:** 1488

**UniProt ID:** [P56545](#)

**Cytogenetics:** 10q26.13

<b>Protein Families:</b>	Stem cell - Pluripotency, Stem cell relevant signaling - Wnt Signaling pathway
<b>Protein Pathways:</b>	Chronic myeloid leukemia, Notch signaling pathway, Pathways in cancer, Wnt signaling pathway
<b>MW:</b>	106.2 kDa
<b>Gene Summary:</b>	<p>This gene produces alternative transcripts encoding two distinct proteins. One protein is a transcriptional repressor, while the other isoform is a major component of specialized synapses known as synaptic ribbons. Both proteins contain a NAD<sup>+</sup> binding domain similar to NAD<sup>+</sup>-dependent 2-hydroxyacid dehydrogenases. A portion of the 3' untranslated region was used to map this gene to chromosome 21q21.3; however, it was noted that similar loci elsewhere in the genome are likely. Blast analysis shows that this gene is present on chromosome 10. Several transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Feb 2014]</p> <p>Transcript Variant: This variant (2) represents the longest transcript and encodes the longer isoform (2). This protein localizes to synaptic ribbons, synapses used for fast tonic neurotransmitter release in a subset of specialized neurons.</p>