

## Product datasheet for **SC127174**

### CTBP2 (NM\_001329) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CTBP2 (NM_001329) Human Untagged Clone
Tag:	Tag Free
Symbol:	CTBP2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC127174 sequence for NM_001329 edited (data generated by NextGen Sequencing)

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ATGGCCCTTGTGGATAAGCACAAAGTCAAGAGACAGCGATTGGACAGAATTTGTGAAGGT
ATCCGCCCCAGATCATGAACGGCCCCCTGCACCCCGCCCCCTGGTGGCGCTGCTGGAC
GGCCGCGACTGCACTGTGGAGATGCCATCCTGAAGGACCTGGCCACTGTGGCCTTCTGT
GACGCGCAGTCGACGCAGGAAATCCACGAGAAGGTTCTAAACGAAGCCGTGGGCGCCATG
ATGTACCACACCATCACCTCACCAGGGAGGACCTGGAGAAGTTCAAGGCCCTGAGAGTG
ATCGTGCGGATAGGCAGTGGCTATGACAACGTGGACATCAAGGCTGCCGGCGAGCTCGGA
ATTGCCGTGTGCAACATCCCGTCTGCAGCCGTGGAAGAGACAGCGGACTTACCATCTGC
CACATCTCAACCTGTACCGGAGGAACACGTGGCTGTACCAGGCACTGCGGGAAGGCACG
CGGTTTCAGAGCGTGGAGCAGATCCGCGAGGTGGCCTCGGGAGCGGCCCGCATCCGTGGG
GAGACGCTGGGCCCTATTGGCTTTGGTTCGCACGGGGCAGGCGGTTGCAGTTCGAGCCAAG
GCCTTTGGATTACGCGTCATATTTTATGACCCCTACTTGCAGGATGGGATCGAGCGGTCC
CTGGGCGTGACAGAGGCTACACCCCTGCAGGATTTGCTGTATCAGAGCGACTGCGTCTCC
TTGCACTGCAATCTCAACGAACATAACCACCACCTCATCAATGACTTTACCATAAAGCAG
ATGAGGCAGGGAGCATTCTTGTGAACGCAGCCCGTGGCGGCCTGGTGGACGAGAAAGCC
TTAGCACAAGCCCTCAAGGAGGGCAGGATACGAGGGGCAGCCCTCGACGTGCATGAGTCA
GAGCCCTTCACTTTGCTCAGGGTCCGTTGAAAGATGCCCGAATCTCATCTGCACTCCT
CACACTGCCTGGTACAGTGAGCAGGCGTCACTGGAGATGAGGGAGGCAGCTGCCACCGAG
ATCCGCCGAGCCATCACAGGTTCGCATCCCAGAAAGCTTAAGAAATTTGTGTGAACAAGGAA
TTCTTTGTACATCAGCGCCTTGGTCAAGTAATAGACCAGCAAGCAATTCATCCTGAGCTC
AATGGTGCCACATACAGATATCCGCCAGGCATCGTGGGTGTGGCTCCAGGAGGACTTCTT
GCAGCCATGGAAGGGATCATCCCTGGAGGCATCCCAGTGACTCACAACCTCCCGACAGTG
GCACATCTTCCCAAGCGCCCTCTCCAACCAGCCACAAAACACGGGGACAATCGAGAG
CACCCCAACGAGCAATAG

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Clone variation with respect to NM\_001329.2



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<b>5' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 5' read for NM_001329 unedited            TAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGAAGTTTTGTGTGTGTGT            CCCTGTGTGCGTGTGTCATTTAAAGGTGGCTCGGGAGCGGCCCGGAGGAGCCGGCGCGG            CCCGAGGAGCGAGGGACCGAACCGGGAGCCATGCCGCGCTGAGGGGGGGCCGCACAGCCG            CCGCCACCGCCACCGCCCGGGTGGGGTGGGAGGGGGCGGGAGACGCCCGCCGCCGCCG            CTCCAGGGTGGGCGCCTTTCGCCGTGGACGCCGACCGTCCGGGACGAGGGTTTCATCACC            TTAATGGTTTTGAACCAATGAAGGTGTATTCCCTTAAAAAGACGGACAGCCCATCGTGT            GAACTATAGAGTTTGTGGACAGATTTATATTGGGTTTATAGTGGCGTCATGCACGCAGAC            TCCTGCAAGTTCCCTAAGTTCTTAGAGGACTGCTTTCCTTTTGTCTGATCTGAGAGTTGCAA            AGTTCCATAAAGAATGGCCCTTGTGGATAAGCACAAAAGTCAAGAGACAGCGATTGGACAG            AATTGTGAAGGGNTTATCCGCCNCAGATCATGAACGGCCCCCTGCACCCCGCCCTG            GTGGCGTGTGTTGGNACGGCCGCGACTGCACTGTGGNAGATGCCNCATCCTGAAGACCTG            GCCACTGTGGCCTTCTGTGACGCGCAGTCGACGCAGGAATCCCGNAAAAGTTCTAACGA            AGGCCGTGGCGCCATGATGTACACACCATCACCTACNAAGGGAGCTGGNNAAAAATTCAG            GCCTGAGAAAGGATCGTGCATAGGCAGTCTATGACAACGTGACATCAGGCTGNCGCGA            GCTCGAATGGCGTGGCACATCCGTTGAGCGGGGAAAAACAGGGACCTACATTGCCATCT            CACTTACCGAGGACCCGGGTGACAGCTGGGAG</p>
<b>3' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 3' read for NM_001329 unedited            GACCGCGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTGCATCATCAGAGGGTT            TTAAGTAACTTACAACCGACTTGCCCGCTCAGTATGCAGTTCAGATGTGAGAGGCGCTTC            TCTGTACAGCAGCCTGTACTGTCTTCAATCCTATGCGTGCAGGTGTCTACCACAGGCAAA            CAGTTTTCTCCCATTTTGTAGTAATGTGATTTTCTATTAGCAAAAAGAGGTCACCAGC            CCCTGTAGACTTAAGGGACTCAAGTCACAGGATGGGGATTTCTCTTAATATTTTTTATT            TTGTTGTTTGAACCTTTGATGCAACATTGTAGAGCAGGGTGTTCAGGACCTGCTGTGCC            AAGGGACTGATAAAGGAAAAAGCTCTATTTATTCTTTTTGTGATTTGATGCACAGATGAA            AAATTAACACACAATAACAGAAGTTGGTCTTAATAAATCACATCCTAGTCTTTTCAGCG            CTTCCGTAAGCAGACGACATCTCAGTTTTCTAGCTCTTGTAGTTTCAACACTGCAACAT            CAATGATGCATATGTCCAGAATCAGTTACAAAGACCATCCGATTTCTTTCTCTTAGTTC            ATCTATTTTTCACTGTCTCTTGGTCCCAAGTGTATCTGAGTGATTACCTTCTGGCATTCT            CTGCTATTGCTCGTTGGGGTCTCTCGATTGTCGCCGTTTGTGGGCTGGTTGGGAGA            GGGCGCTNTGGAANGATGTGCCACTGTCCGGAAGGTGTGAGTCACTGGGATGCCNCAGG            GATGATCCCTTCCATGGCTGCANGAAGTNTNCTGGAGCCACACCCACGATGCCNNTGCG            ATATCTGTATGTGNACCATGAGCTCANGATGAAATNNGCTGCTGGNCTATTACTGAC            CAAGCGGCTGATGTGACAAAGAATTCCTTTGTACACATTNCTTAGCTTNTGGATGCGA            CCTGTGATGGCTCGCGGATCTCGTGGANNTGCTNNCTCATTATGACGCTGCTACTGTCC            AGCNGGTNAGAAG</p>
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_001329
<b>Insert Size:</b>	2660 bp
<b>OTI Disclaimer:</b>	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).
<b>Components:</b>	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\\_001329.1](#), [NP\\_001320.1](#)

**RefSeq Size:** 2368 bp

**RefSeq ORF:** 1338 bp

**Locus ID:** 1488

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

**Cytogenetics:** 10q26.13

**Domains:** 2-Hacid\_DH, 2-Hacid\_DH\_C

**Protein Families:** Stem cell - Pluripotency, Stem cell relevant signaling - Wnt Signaling pathway

**Protein Pathways:** Chronic myeloid leukemia, Notch signaling pathway, Pathways in cancer, Wnt signaling pathway

**Gene Summary:** 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]

Transcript Variant: This variant (1) contains a distinct 5' UTR and 5' CDS, compared to variant 2. Variants 1, 3, 4, and 5-8 all encode the same isoform (1), which has a distinct N-terminus that is 540 aa shorter than the N-terminus of isoform 2. The protein is thought to bind to the C-terminus of the adenovirus E1A proteins. Studies in mice suggest that this protein is involved in transcriptional repression. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.