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Product datasheet for RC224861

CTBP2 (NM_001329) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CTBP2 (NM_001329) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CTBP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC224861 representing NM_001329
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCCTTGTGGATAAGCACAAAGTCAAGAGACAGCGATTGGACAGAATTTGTGAAGGTATCCGCCCCC
AGATCATGAACGGCCCCCTGCACCCCCGCCCCCTGGTGGCGCTGCTGGACGGCCGCGACTGCACTGTGGA
GATGCCCATCCTGAAGGACCTGGCCACTGTGGCCTTCTGTGACGCGCAGTCGACGCAGGAAATCCACGAG
AAGGTTCTAAACGAAGCCGTGGGCGCCATGATGTACCACACCATCACCCTCACCAGGGAGGACCTGGAGA
AGTTCAAGGCCCTGAGAGTGATCGTGCGGATAGGCAGTGGCTATGACAACGTGGACATCAAGGCTGCCGG
CGAGCTCGGAATTGCCGTGTGCAACATCCCGTCTGCAGCCGTGGAAGAGACAGCGGACTCTACCATCTGC
CACATCCTCAACCTGTACCGGAGGAACACGTGGCTGTACCAGGCACTGCGGGAAGGCACGCGGGTTCAGA
GCGTGGAGCAGATCCGCGAGGTGGCCTCGGGAGCGGCCCGCATCCGTGGGGAGACGCTGGGCCTCATTGG
CTTTGGTCGCACGGGGCAGGCGGTTGCAGTTCGAGCCAAGGCCTTTGGATTCAGCGTCATATTTTATGAC
CCCTACTTGCAGGATGGGATCGAGCGGTCCCTGGGCGTGCAGAGGGTCTACACCCTGCAGGATTTGCTGT
ATCAGAGCGACTGCGTCTCCTTGCACTGCAATCTCAACGAACATAACCACCACCTCATCAATGACTTTAC
CATAAAGCAGATGAGGCAGGGAGCATTCCTTGTGAACGCAGCCCGTGGCGGCCTGGTGGACGAGAAAGCC
TTAGCACAAGCCCTCAAGGAGGGCAGGATACGAGGGGCAGCCCTCGACGTGCATGAGTCAGAGCCCTTCA
GCTTTGCTCAGGGTCCGTTGAAAGATGCCCCGAATCTCATCTGCACTCCTCACACTGCCTGGTACAGTGA
GCAGGCGTCACTGGAGATGAGGGAGGCAGCTGCCACCGAGATCCGCCGAGCCATCACAGGTCGCATCCCA
GAAAGCTTAAGAAATTGTGTGAACAAGGAATTCTTTGTCACATCAGCGCCTTGGTCAGTAATAGACCAGC
AAGCAATTCATCCTGAGCTCAATGGTGCCACATACAGATATCCGCCAGGCATCGTGGGTGTGGCTCCAGG
AGGACTTCCTGCAGCCATGGAAGGGATCATCCCTGGAGGCATCCCAGTGACTCACAACCTCCCGACAGTG
GCACATCCTTCCCAAGCGCCCTCTCCCAACCAGCCCACAAAACACGGGGACAATCGAGAGCACCCCAACG
AGCAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC224861 representing NM_001329
Red=Cloning site Green=Tags(s)

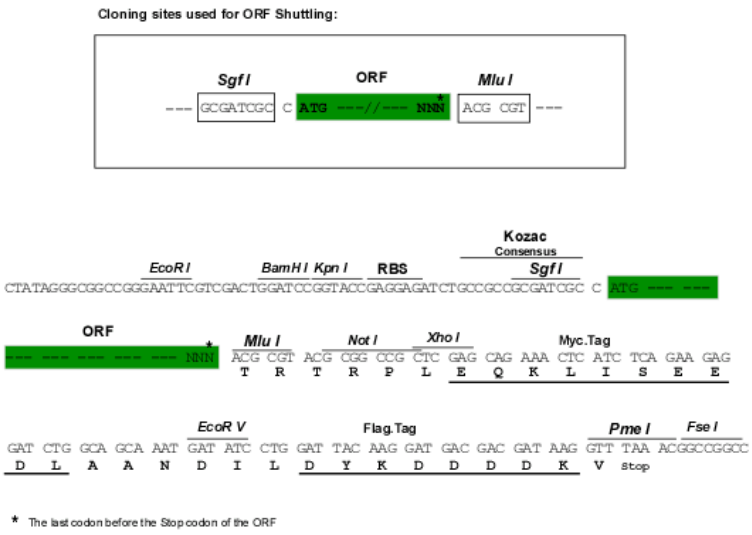
MALVDKHKVKRQRLDRICEGIRPQIMNGPLHPRPLVALLDGRDCTVEMPILKDLATVAFCDAQSTQEIHE
KVLNEAVGAMMYHTITLTREDLEKFKALRVIVRIGSGYDNVDIKAAGELGIAVCNIPSAAVEETADSTIC
HILNLYRRNTWLYQALREGTRVQSVEQIREVASGAARIRGETLGLIGFGRTGQAVAVRAKAFGFSVIFYD
PYLQDGIERSLGVQRVYTLQDLLYQSDCVSLHCNLNEHNHHLINDFTIKQMRQGAFLVNAARGGLVDEKA
LAQALKEGRIRGAALDVHESEPFSFAQGPLKDAPNLICTPHTAWYSEQASLEMREAAATEIRRAITGRIP
ESLRNCVNKEFFVTSAPWSVIDQQAIHPELNGATYRYPPGIVGVAPGGLPAAMEGIIPGGIPVTHNLPTV
AHPSQAPSPNQPTKHGDNREHPNEQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6705_e12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001329

ORF Size: 1335 bp

OTI Disclaimer: 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

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_001329.4

RefSeq Size: 2368 bp

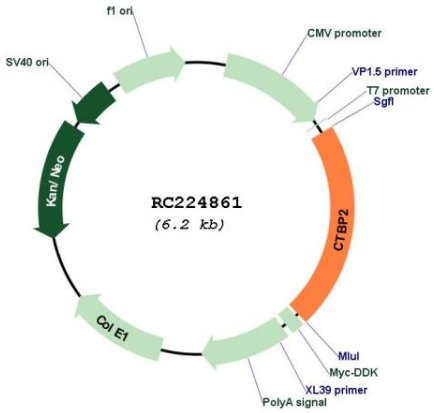
RefSeq ORF: 1338 bp

Locus ID: 1488

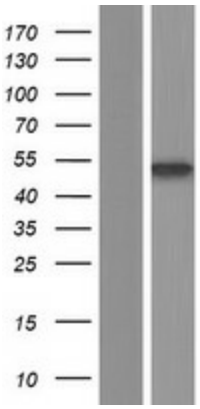
UniProt ID: P56545

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
MW:	48.8 kDa
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+ binding domain similar to NAD+-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]

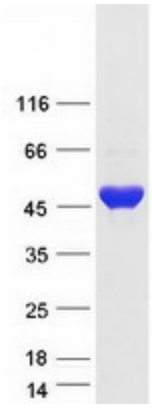
Product images:



Circular map for RC224861



Western blot validation of overexpression lysate (Cat# [LY420003]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224861 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CTBP2 protein (Cat# [TP324861]). The protein was produced from HEK293T cells transfected with CTBP2 cDNA clone (Cat# RC224861) using MegaTran 2.0 (Cat# [TT210002]).