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Product datasheet for RC213283

CTBP2 (NM_022802) Human Tagged ORF Clone

Product data:

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

ORF Nucleotide Sequence:

>RC213283 representing NM_022802
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCAGTTCCCAGCAGGCATATAAATATTGGTCGTTCTCAGAGCTGGGATGCTGCTGGGTGGTACGAGG
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ATAGACCAGCAAGCAATTCATCCTGAGCTCAATGGTGCCACATACAGATATCCGCCAGGCATCGTGGGTG
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC213283 representing NM_022802
Red=Cloning site Green=Tags(s)

MPVPSRHINIGRSQSWDAAGWYEGPWENAESLRPLGRRSSLTYGTAEGTWFEPNHRPQDAALPVAAEPYL
YREAVYNSVAARKGSTPDFTFYDSRQAVMSGRSPLLPREYYSDPSGAARVPKEPPLYRDPGVSRPVPSYG
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IRPQIMNGPLHPRPLVALLDGRDCTVEMPILKDLATVAFCDAQSTQEIHEKVLNEAVGAMMYHTITLTRE
DLEKFKALRVIVRIGSGYDNVDIKAAGELGIAVCNIPSAAVEETADSTICHILNLYRRNTWLYQALREGT
RVQSVEQIREVASGAARIRGETLGLIGFGRTGQAVAVRAKAFGFSVIFYDPYLQDGIERSLGVQRVYTLQ
DLLYQSDCVSLHCNLNEHNHHLINDFTIKQMRQGAFLVNAARGGLVDEKALAQALKEGRIRGAALDVHES
EPFSFAQGPLKDAPNLICTPHTAWYSEQASLEMREAAATEIRRAITGRIPESLRNCVNKEFFVTSAPWSV
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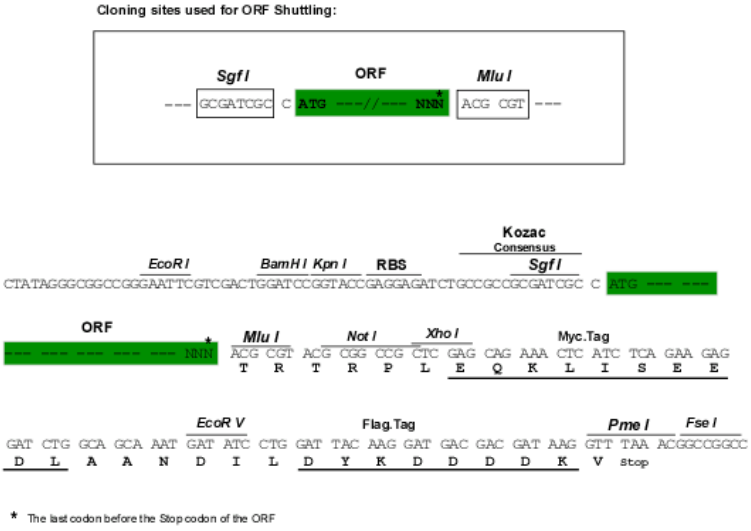
HPNEQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja2252_f05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

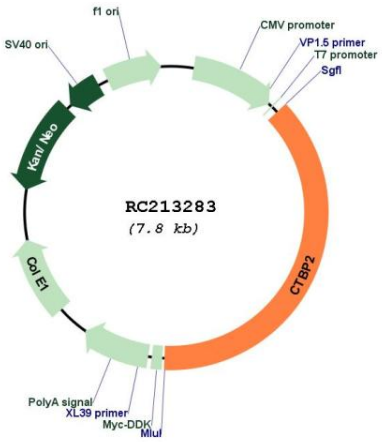


ACCN: NM_022802

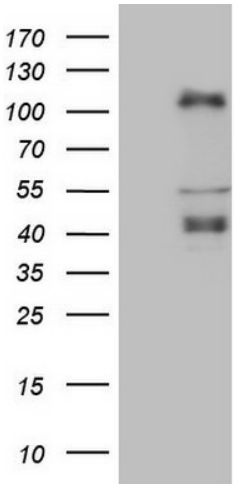
ORF Size: 2955 bp

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_022802.3
RefSeq Size:	4752 bp
RefSeq ORF:	2958 bp
Locus ID:	1488
UniProt ID:	P56545
Cytogenetics:	10q26.13
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:	106.6 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 RC213283



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CTBP2 (Cat# RC213283, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CTBP2 (Cat# [TA807909])(1:2000).