

Product datasheet for RC207442

CBR4 (NM_032783) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CBR4 (NM_032783) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CBR4
Synonyms:	SDR45C1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC207442 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGACAAAGTGTGTGCTGTTTTGGAGGCTCCCGAGGCATTGGCAGAGCTGTGGCCAGTTAATGGCCC
GGAAAGGCTACCGACTGGCGGTCATTGCCAGAACTGGAAGGGGCCAAAGCCGCCCGGTGACCTCGG
CGGAGATCATTGGCATTAGCTGTGATGTTGCTAAAGAATGATGTTCAAAATACATTTGAAGAGCTG
GAGAAACATTTAGGTCGAGTAAATTTCTGGTAAATGCAGCTGGTATTAACAGGGATGGTCTTTAGTAA
GAACAAAAGTGAAGATATGGTATCTCAGCTTCACTAACTCTGGGTCCATGCTGACCTGTAAGC
TGCCATGAGGACTATGATTCAACAACAGGGAGGCTCTATTGTTAATGTAGGAAGCATTGTTGGCTTAAAA
GGCAACTCTGGCCAGTCCGTTTACAGTGCCAGTAAAGGAGGATTAGTTGGATTTTACGTGCTCTTGCTA
AAGAGGTAGCAAGAAAGAAAATTAGAGTGAATGTAGTTGCACCAGGATTTGTACACACAGATATGACGAA
AGACTTGAAGAAGAACAATTTAAAGAAAATATTCCTCTGGGAGGTTGGAGAACTATTGAGGTGGCA
CATGCGGTTGTGTTTCTTTTAGAATCACCGTATATTACAGGGCATGTTCTGGTAGTGGATGGGGATTAC
AACTCATTTTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC207442 protein sequence
Red=Cloning site Green=Tags(s)

MDKVCVAVFGGSRGIGRAVAQLMARKGYRLAVIARNLEGAKAAAGDLGGDHLAFSCDVAKEHDVQNTFEEL
 EKHLGRVNFLVNAAGINRDGLLVRTKTEDMVSQ LHTNLLG SMLTCKAAMRTMIQQQGGSI VNVGSI VGLK
 GNSGQSVYSASKGGLVGF SRALAKEVARKKIRVNVVAPGFVHTDMTKDLKEEHLKKNIP LGRFGETIEVA
 HAVVFLLLESPYITGHVLVVDGGLQLIL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6337_f11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_032783

ORF Size: 711 bp

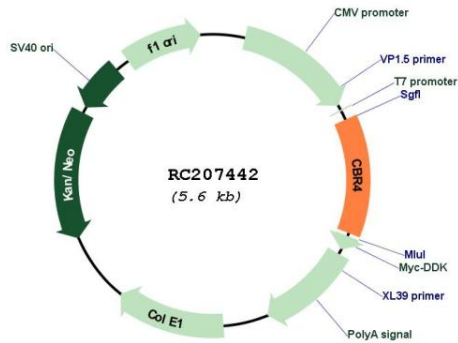
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

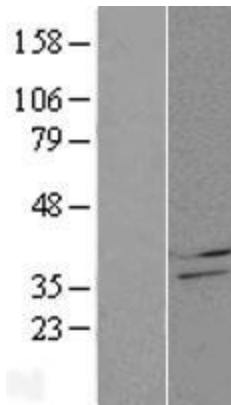
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">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_032783.5
RefSeq Size:	3523 bp
RefSeq ORF:	714 bp
Locus ID:	84869
UniProt ID:	Q8N4T8
Cytogenetics:	4q32.3
Domains:	adh_short
Protein Families:	Druggable Genome
MW:	25.3 kDa
Gene Summary:	<p>The heterotetramer with HSD17B8 has NADH-dependent 3-ketoacyl-acyl carrier protein reductase activity, and thereby plays a role in mitochondrial fatty acid biosynthesis (PubMed:19571038, PubMed:25203508). Within the heterotetramer, HSD17B8 binds NADH; CBR4 binds NADPD (PubMed:25203508). The homotetramer has NADPH-dependent quinone reductase activity (PubMed:19000905). Both homotetramer and the heterotetramer have broad substrate specificity and can reduce 9,10-phenanthrenequinone, 1,4-benzoquinone and various other o-quinones and p-quinones (in vitro) (PubMed:19000905, PubMed:19571038, PubMed:25203508).[UniProtKB/Swiss-Prot Function]</p>

Product images:



Circular map for RC207442



Western blot validation of overexpression lysate (Cat# [LY409926]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207442 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).