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Product datasheet for RC213247

BCR (NM_021574) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BCR (NM_021574) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	BCR
Synonyms:	ALL; BCR1; CML; D22S11; D22S662; PHL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC213247 representing NM_021574
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
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Protein Sequence:

>RC213247 representing NM_021574
Red=Cloning site Green=Tags(s)

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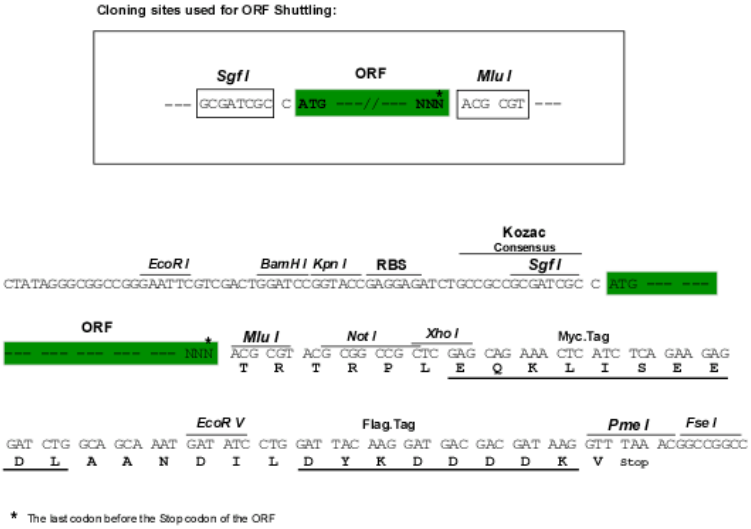
Chromatograms: https://cdn.origene.com/chromatograms/mk8010_f05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

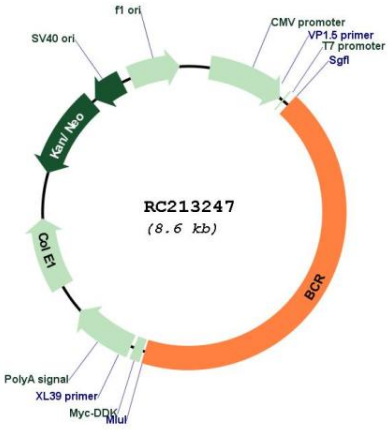


ACCN: NM_021574

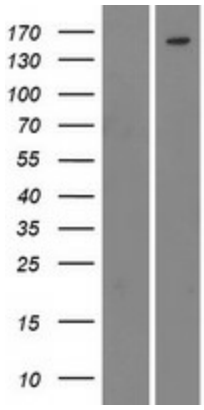
ORF Size: 3681 bp

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_021574.3
RefSeq Size:	6795 bp
RefSeq ORF:	3684 bp
Locus ID:	613
UniProt ID:	P11274
Cytogenetics:	22q11.23
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Chronic myeloid leukemia, Pathways in cancer
MW:	137.5 kDa
Gene Summary:	A reciprocal translocation between chromosomes 22 and 9 produces the Philadelphia chromosome, which is often found in patients with chronic myelogenous leukemia. The chromosome 22 breakpoint for this translocation is located within the BCR gene. The translocation produces a fusion protein which is encoded by sequence from both BCR and ABL, the gene at the chromosome 9 breakpoint. Although the BCR-ABL fusion protein has been extensively studied, the function of the normal BCR gene product is not clear. The unregulated tyrosine kinase activity of BCR-ABL1 contributes to the immortality of leukaemic cells. The BCR protein has serine/threonine kinase activity and is a GTPase-activating protein for p21rac and other kinases. Two transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Jan 2020]

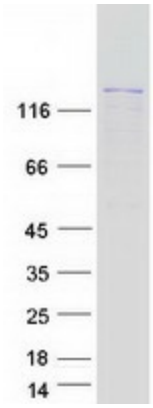
Product images:



Circular map for RC213247



Western blot validation of overexpression lysate (Cat# [LY411962]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213247 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified BCR protein (Cat# [TP313247]). The protein was produced from HEK293T cells transfected with BCR cDNA clone (Cat# RC213247) using MegaTran 2.0 (Cat# [TT210002]).