

Product datasheet for **SC304938**

BCR (NM_021574) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BCR (NM_021574) Human Untagged Clone
Tag:	Tag Free
Symbol:	BCR
Synonyms:	ALL; BCR1; CML; D22S11; D22S662; PHL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC304938 representing NM_021574. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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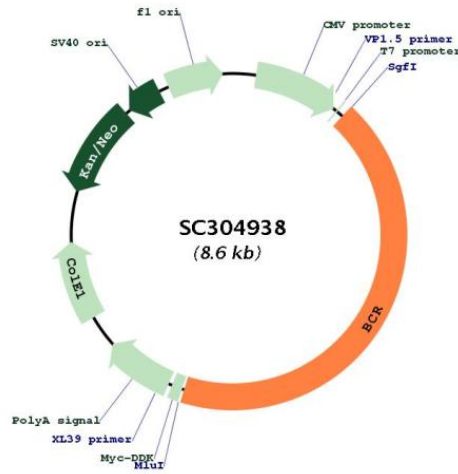
[View online >](#)

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Restriction Sites:

SgfI-MluI

Plasmid Map:



ACCN: NM_021574

Insert Size: 3684 bp

OTI Disclaimer: 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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_021574.2](#)

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: 137.7 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]
Transcript Variant: This variant (2) lacks an alternate in-frame exon compared to variant 1. The resulting isoform (2) has the same N- and C-termini but is shorter compared to isoform 1.