

## Product datasheet for **RC209133**

### **BCAR1 (NM\_014567) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	BCAR1 (NM_014567) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	BCAR1
Synonyms:	CAS; CAS1; CASS1; CRKAS; P130Cas
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC209133 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAACCACCTGAACGTGCTGGCCAAAGCGCTCTATGACAATGTGGCCGAGTCCCCGGATGAGCTCTCCT  
 TCCGCAAGGGTGACATCATGACGGTGTGGAGCAGGACACGCAGGGCCTGGACGGCTGGTGGCTCTGCTC  
 GCTGCATGGGCGCCAGGGCATCGTGCTGGGAACCGCCTCAAGATCTTGGTGGGCATGTATGATAAGAAG  
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 CCTGCTGTGCGACCTCTGCGCGGCATCGTGGCCACCACCAAGGCCGCTGCCTTGACGTACCCATCGCCT  
 TCCGCGGCCAGGACATGGTGGAGAGGTC AAGGAGCTGGCCACAGCACCCAGCAGTTCGCGCCGCTCC  
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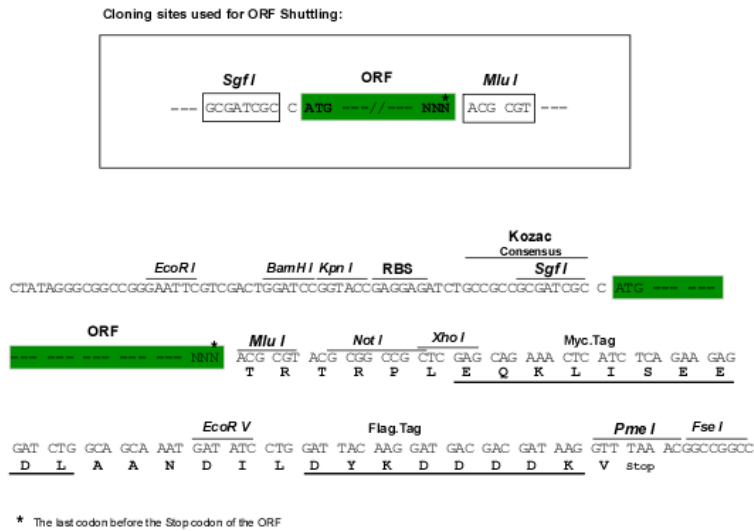
Protein Sequence: >RC209133 protein sequence  
 Red=Cloning site Green=Tags(s)

MNHLNVLAKALYDNVAESPDELFRKGDIMTVLEQDTQGLDGWWLCSLHGRQGI VPGNRLKILVGM YDKK  
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 PAKQTSTFSKQTPHHFPNPATDLYQVPPGGGPAQDIYQVPPSAGMGHDIYQVPPSMDTRSWEGTKPPA  
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 PPPDSPPAEDVYVPPPAPDLYDVPPGLRRPGTLYDVPRERVL PPEVADGGVVDSGVYAVPPAEREA  
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 RSPSEPQEPLVQDLQAAVAAVQSAVHELLEFARSAVGNAHTSDRALHAKLSRQLQKMEDVHQT LVAHGQ  
 ALDAGRGGSGATLEDLDRLVACSRAPEDAKQLASFLHGNASLLFRRTKATAPGPEGGGLHPNPDKTS  
 SIQSRPLSPPKFTSQDSPDQYENSEGGWMEYDYVHLQGKEEFKTKELLEKGSITRQKKSQLELQQ  
 LKQFERLEQEVSRPIDHDLANWTPAQPLAPGRTGGLGPSDRQLLLFYLEQCEANL TLTNAVDAFFTAVA  
 TNQPPKIFVAHSKFVILSAHKL VFIGDTLSRQAKAADVRSQVTHYSNLLCDLLRGIVATTKAAALQYPS  
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Restriction Sites: SgfI-MluI

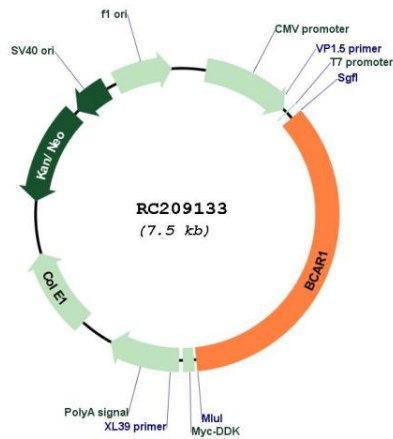
Cloning Scheme:



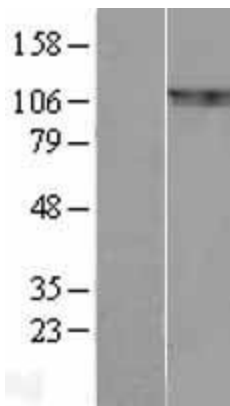
<b>ACCN:</b>	NM_014567
<b>ORF Size:</b>	2610 bp
<b>OTI Disclaimer:</b>	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), 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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_014567.5</a>
<b>RefSeq Size:</b>	3257 bp
<b>RefSeq ORF:</b>	2613 bp
<b>Locus ID:</b>	9564
<b>UniProt ID:</b>	<a href="#">P56945</a>
<b>Cytogenetics:</b>	16q23.1
<b>Domains:</b>	SH3, Extensin_2
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Chemokine signaling pathway, Focal adhesion, Leukocyte transendothelial migration, Regulation of actin cytoskeleton
<b>MW:</b>	93.4 kDa

**Gene Summary:**

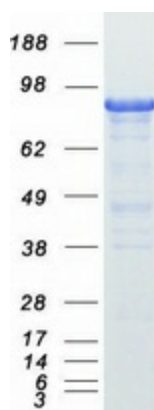
The protein encoded by this gene is a member of the Crk-associated substrate (CAS) family of scaffold proteins, characterized by the presence of multiple protein-protein interaction domains and many serine and tyrosine phosphorylation sites. The encoded protein contains a Src-homology 3 (SH3) domain, a proline-rich domain, a substrate domain which contains 15 repeat of the YxxP consensus phosphorylation motif for Src family kinases, a serine-rich domain, and a bipartite Src-binding domain, which can bind both SH2 and SH3 domains. This adaptor protein functions in multiple cellular pathways, including in cell motility, apoptosis and cell cycle control. Dysregulation of this gene can have a wide range of effects, affecting different pathways, including cardiac development, vascular smooth muscle cells, liver and kidney function, endothelial migration, and cancer. [provided by RefSeq, Sep 2017]

**Product images:**


Circular map for RC209133



Western blot validation of overexpression lysate (Cat# [LY415204]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209133 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified BCAR1 protein (Cat# [TP309133]). The protein was produced from HEK293T cells transfected with BCAR1 cDNA clone (Cat# RC209133) using MegaTran 2.0 (Cat# [TT210002]).