

## Product datasheet for **RG230550**

### **BCAR1 (NM\_001170719) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	BCAR1 (NM_001170719) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	BCAR1
Synonyms:	CAS; CAS1; CASS1; CRKAS; P130Cas
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG230550 representing NM\_001170719  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAGAACGTGCTGGCCAAAGCGCTCTATGACAAATGTGGCCAGTCCCCGGATGAGCTCTCCTTCCGCA  
 AGGGTGACATCATGACGGTGTGGAGCAGGACACGCAGGGCCTGGACGGCTGGTGGCTCTGCTCGCTGCA  
 TGGGCGCCAGGGCATCGTGCCTGGGAACCGCTCAAGATCTTGGTGGGCATGTATGATAAGAAGCCAGCA  
 GGGCCTGGCCCCGGCCCTCCCGCCACCCCGGCCAGCCTCAGCCTGGCCTCCATGCCCCAGCGCCTCCGG  
 CCTCCCAGTACACGCCCATGCTCCCAACACCTACCAGCCCCAGCCAGACAGCGTCTACCTGGTGCCAC  
 TCCCAGCAAGGCTCAGCAAGGCCTTACCAAGTCCCGGGTCCCAGCCCTCAGTTCAGTCTCCCCAGCC  
 AAGCAGACATCCACCTTCTCGAAGCAGACACCCCATACCCGTTTCCCAGCCGGCCACAGACCTGTACC  
 AGGTGCCCCAGGGCCTGGAGGCCCTGCCAGGATATTTACCAGGTGCCACCTTCTGCCGGGATGGGGCA  
 TGACATCTACCAGTCCCCCGTCCATGGACACACGCAGCTGGGAGGGCACGAAGCCCCGGCAAAGGTG  
 GTGGTGCCACCCCGCTGGGGCAGGGCTATGTATACGAGGCCGCCAGCCGGAGCAGGACAGTACGACA  
 TCCCGCGACACCTGCTGGCCCCGGGGCCACAGGACATCTATGATGTGCCCCCGTTCCGGGGCTGCTTCC  
 CAGCCAGTATGGCCAGGAGGTGTATGACACACCCCCATGGTGTCAAGGGTCCCAATGGCCGAGACCCG  
 TTGCTGGAGGTGTATGACGTGCCCCCACTGTGGAGAAGGGCCTGCCACCGTCCAACCACCACGCAGTCT  
 ACGACGTTCTCCATCGGTGAGCAAGGATGTGCCCGATGGCCACTGCTGCGTGAAGGAGCTACGATGT  
 GCCCCCGCCTTCGCCAAGGCCAAGCCCTTGACCCGGCCCGCACCCACTGGTACTGGCTGCGCCCCCT  
 CCAGACTCCCCGCGGCCGAGGACGTGTATGACGTGCCCCCGGGCTCCTGACCTCTACGACGTGCCCC  
 CTGGCTTGGCGCGCCTGGCCCCGGCACCTGTACGATGTGCCCGTGAACGGGTGCTTCTCCTGAGGT  
 GGCTGATGGTGGCGTGGTCGACAGTGGTGTATGCGGTGCCCTCCCCAGCTGAACGTGAAGCCCCGGCA  
 GAGGGCAAGCGCCTGTCCGCTCCAGCACCGGCAGCACACGCAGCAGCCAGTCTGCGTCTCCTTGAGG  
 TGGCAGGGCCGGGCCGGGAACCCCTGGAGCTGGAAGTTGCTGTGGAGGCCTGGCACGGCTGCAGCAGGG  
 TGTGAGCGCCACCGTTGCCACCTTCTGGACTGGCAGGCAGCGCGGTGCGACTGGGAGCTGGCGTAGC  
 CCCTCTGAGCCACAGGAGCCGCTGGTGCAGGACCTGCAGGCTGCTGTGGCCGCTGTCCAGAGTGCCGTCC  
 ACGAGCTTTGGAGTTTGCCTCGAGCGCGTGGGCAATGCTGCCACACATCTGACCGTGCCTGCATGC  
 CAAGCTTAGCCCGCAGCTGCAGAAGATGGAGGACGTGCACCAGACGCTGGTGGCACATGGTCAGGCCCTC  
 GACGCTGGCCGGGAGGCTCTGGAGCCACCTTGAGGACCTGGACCGCTGGTGGCTGCTCGCGGGCTG  
 TGCCCGAGGACGCCAAGCAGCTGGCCTCCTTCTGCACGGCAATGCCTCACTGCTTTCAGACGGACCAA  
 GGCCACTGCCCGGGCCTGAGGGGGTGGCACCTGCACCCCAACCCCACTGACAAGACAGCAGCATC  
 CAGTACGACCCCTGCCCTACCCCTAAGTTCACCTCCCAGGACTCGCCAGATGGGCAGTACGAGAACA  
 GCGAGGGGGGCTGGATGGAGGACTATGACTACGTCCACCTACAGGGGAAGGAGGATTTGAGAAGACCCA  
 GAAGGAGCTGCTGGAAAAGGGCAGCATCACGGGCAGGGCAAGAGCCAGCTGGAGTTGCAGCAGCTGAAG  
 CAGTTTGAACGACTGGAACAGGAGGTGTACGGCCCATAGACCAGACCTGGCCAACCTGGACGCCAGCCC  
 AACCCCTGGCCCCGGGGCAACAGGCGGCTGGGGCCCTCGGACCGGCAGCTGCTCTTCTACCTGGA  
 GCAGTGTGAGGCCAACCTGACCACACTGACCAACGCCGTGGACGCCTTTTACCGCCGTGGCCACCAAC  
 CAGCCGCCAAGATCTTTGTGGCGCACAGCAAGTTCGTATCCTCAGCGCCACAAGCTGGTGTTCATCG  
 GGGACACACTGTACGGCAGGCCAAGGCTGCTGACGTGCGCAGCCAGGTGACCCACTACAGCAACCTGCT  
 GTGCGACCTCTGCGCGCATCGTGGCCACCACCAAGGCCGCTGCCTTGCAGTACCCATCGCCTCCGCG  
 GCCAGGACATGGTGGAGAGGTCAAGGAGCTGGGCCACAGCACCCAGCAGTTCGCCCGCTCCTAGGCC  
 AGCTGGCAGCCGCC

**ACCGTACGCGGCCGCTCGAG** - GFP Tag - **GTTTAA**

**Protein Sequence:** >RG230550 representing NM\_001170719  
 Red=Cloning site Green=Tags(s)

MENVLAKALYDNVAESPDEL SFRKGDIMTVLEQDTQGLDGWWLCSLHGRQGI VPGNRLKILVGM YDKKPA  
 GPGGPPATPAQPQPLHAPAPPASQYTPMLPNTYQPQDSVYL VPTPSKAQQGLYQVPGPSPQFQSPPA  
 KQTSTFSKQTPHHPFSPATDL YQVPPGPGGPAQDIYQVPPSAGMGHDIYQVPPSMDTRSWEGTKPPAKV  
 VVPTRVGGQGYVYEAQAPEQDEYDIPRHLLAPGPQDIYDVPPVRGLLPSQYQGEVYDTPPMAVKGPNGRDP  
 LLEVYDVPPSVEKGLPPSNHHAVYDVPPSVSKDVPDGP LLREETYDVPPAF AKAKPFDPARTPLVLAAPP  
 PDSPPAEDVYDVPPPAPDLYDVPPGLRRP GPTLYDVPRERVL PPEVADGGVVD SGVYAVPPAEREAPA  
 EGKRLSASSTGSTRSSQSASSLEVAGPGREPLELEVAVEALARLQQGVSATVAHLLDLAGSAGATGSWRS  
 PSEPEPLVQDLQA AVAAVQSAVHELLEFARS AVGNA AHTSDRALHAKLSRQLQK MEDVHQTLVAHGQAL  
 DAGRGGSGATLEDL DRLVACSRAPEDAKQLASFLHGNASLLFRRTKATAPGPEGGTLHPNPTDKTSSI  
 QSRPLSPPKFTSQDSPDGOYENSEGGW MEDYDYVHLQGKEEF EKTQKELLEKGSITRQKKSQLELQQLK  
 QFERLEQEVSRPIDHDLANWTPAQPLAPGRTGGLGPSDRQLLLFYLEQCEANLTTLNAVDAFFTAVATN  
 QPPKIFVAHSKFVILSAHKL VFIGDTLSRQAKAADVRSQVTHYSNLLCDLLRGIVATTKAAALQYSPSPA  
 AQDMVERVKELGHSTQQFRRVLGQLAAA

TRTRPLE - GFP Tag - V

**Restriction Sites:**

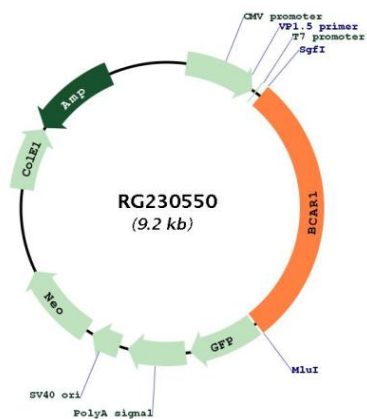
SgfI-MluI

**Cloning Scheme:**



<b>ACCN:</b>	NM_001170719
<b>ORF Size:</b>	2604 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_001170719.3</a>
<b>RefSeq Size:</b>	3372 bp
<b>RefSeq ORF:</b>	2607 bp
<b>Locus ID:</b>	9564
<b>UniProt ID:</b>	<a href="#">P56945</a>
<b>Cytogenetics:</b>	16q23.1
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Chemokine signaling pathway, Focal adhesion, Leukocyte transendothelial migration, Regulation of actin cytoskeleton
<b>Gene Summary:</b>	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 RG230550