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Product datasheet for RG230561

BCAR1 (NM_001170716) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BCAR1 (NM_001170716) 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)

ORF Nucleotide Sequence:

>RG230561 representing NM_001170716
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCTCACCCACCGTCCCCAGGAAGCAGAACAGAGGGGTCGGACCCCTGGTCCTTCCTTTGAGTGGAACG
TGCTGGCCAAAGCGCTCTATGACAATGTGGCCGAGTCCCCGGATGAGCTCTCCTTCCGCAAGGGTGACAT
CATGACGGTGCTGGAGCAGGACACGCAGGGCCTGGACGGCTGGTGGCTCTGCTCGCTGCATGGGCGCCAG
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CACGCCCATGCTCCCCAACACCTACCAGCCCCAGCCAGACAGCGTCTACCTGGTGCCCACTCCCAGCAAG
GCTCAGCAAGGCCTCTACCAAGTCCCGGGTCCCAGCCCTCAGTTCCAGTCTCCCCCAGCCAAGCAGACAT
CCACCTTCTCGAAGCAGACACCCCATCACCCGTTTCCCAGCCCGGCCACAGACCTGTACCAGGTGCCCCC
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CCCGCGTGGGGCAGGGCTATGTATACGAGGCCGCCCAGCCGGAGCAGGACGAGTACGACATCCCGCGACA
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CTGCGCGGCATCGTGGCCACCACCAAGGCCGCTGCCTTGCAGTACCCATCGCCTTCCGCGGCCCAGGACA
TGGTGGAGAGGGTCAAGGAGCTGGGCCACAGCACCCAGCAGTTCCGCCGCGTCCTAGGCCAGCTGGCAGC
CGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

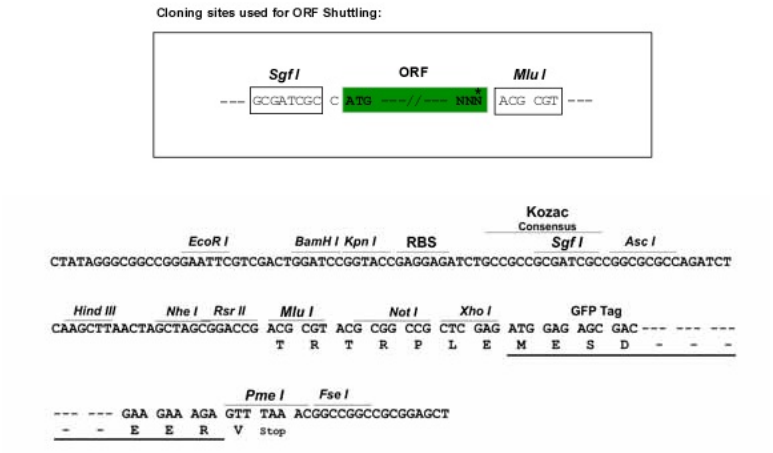
>RG230561 representing NM_001170716
Red=Cloning site Green=Tags(s)

MLTHRPQEAEQRGRTPGPSFEWNVLAKALYDNVAESPDELSFRKGDIMTVLEQDTQGLDGWWLCSLHGRQ
GIVPGNRLKILVGMYDKKPAGPGPGPPATPAQPQPGLHAPAPPASQYTPMLPNTYQPQPDSVYLVPTPSK
AQQGLYQVPGPSPQFQSPPAKQTSTFSKQTPHHPFPSPATDLYQVPPGPGGPAQDIYQVPPSAGMGHDIY
QVPPSMDTRSWEGTKPPAKVVVPTRVGQGYVYEAAQPEQDEYDIPRHLLAPGPQDIYDVPPVRGLLPSQY
GQEVYDTPPMAVKGPNGRDPLLEVYDVPPSVEKGLPPSNHHAVYDVPPSVSKDVPDGPLLREETYDVPPA
FAKAKPFDPARTPLVLAAPPPDSPPAEDVYDVPPPAPDLYDVPPGLRRPGPGTLYDVPRERVLPPEVADG
GVVDSGVYAVPPPAEREAPAEGKRLSASSTGSTRSSQSASSLEVAGPGREPLELEVAVEALARLQQGVSA
TVAHLLDLAGSAGATGSWRSPSEPQEPLVQDLQAAVAAVQSAVHELLEFARSAVGNAAHTSDRALHAKLS
RQLQKMEDVHQTLVAHGQALDAGRGGSGATLEDLDRLVACSRAVPEDAKQLASFLHGNASLLFRRTKATA
PGPEGGGTLHPNPTDKTSSIQSRPLPSPPKFTSQDSPDGQYENSEGGWMEDYDYVHLQGKEEFEKTQKEL
LEKGSITRQGKSQLELQQLKQFERLEQEVSRPIDHDLANWTPAQPLAPGRTGGLGPSDRQLLLFYLEQCE
ANLTTLTNAVDAFFTAVATNQPPKIFVAHSKFVILSAHKLVFIGDTLSRQAKAADVRSQVTHYSNLLCDL
LRGIVATTKAAALQYPSPSAAQDMVERVKELGHSTQQFRRVLGQLAAA

TRTRPLE - GFP Tag - V

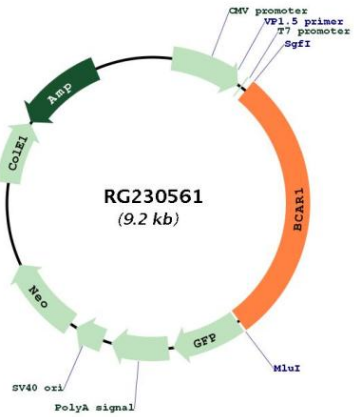
Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN:	NM_001170716
ORF Size:	2664 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_001170716.3
RefSeq Size:	3195 bp
RefSeq ORF:	2667 bp
Locus ID:	9564
UniProt ID:	P56945
Cytogenetics:	16q23.1
Protein Families:	Druggable Genome
Protein Pathways:	Chemokine signaling pathway, Focal adhesion, Leukocyte transendothelial migration, Regulation of actin cytoskeleton
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 RG230561