

## Product datasheet for **SC329198**

### BCAR1 (NM\_001170715) Human Untagged Clone

#### Product data:

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids                       |
| Product Name:             | BCAR1 (NM_001170715) Human Untagged Clone |
| Tag:                      | Tag Free                                  |
| Symbol:                   | BCAR1                                     |
| Synonyms:                 | CAS; CAS1; CASS1; CRKAS; P130Cas          |
| Mammalian Cell Selection: | None                                      |
| Vector:                   | <u><a href="#">pCMV6-XL5</a></u>          |
| E. coli Selection:        | Ampicillin (100 ug/mL)                    |



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**Fully Sequenced ORF:** >NCBI ORF sequence for NM\_001170715, the custom clone sequence may differ by one or more nucleotides

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ATGCACTGCCCTGGTGAGGCTCCTCTGGCTGCCCCAGGCCACACCCAAGGATCCCTGC
CTCAGAAACGTGCTGGCCAAAGCGCTCTATGACAATGTGGCCGAGTCCCCGGATGAGTC
TCCTTCCGCAAGGGTGACATCATGACGGTGTGGAGCAGGACACGCAGGGCCTGGACGGC
TGGTGGCTCTGCTCGCTGCATGGGCGCCAGGCATCGTGCCTGGGAACCGCTCAAGAT
TTGGTGGGCATGTATGATAAGAAGCCAGCAGGGCCTGGCCCGGCCCTCCCGCACCCCG
GCCAGCCTCAGCTGGCCTCCATGCCCCAGCGCCTCCGGCCTCCAGTACACGCCCATG
CTCCCCAACACCTACCAGCCCCAGCCAGACAGCGTCTACCTGGTGCCCACTCCCAGCAAG
GCTCAGCAAGGCCTTACCAAGTCCCGGGTCCCAGCCCTCAGTTCAGTCTCCCCAGCC
AAGCAGACATCCACCTTCTCGAAGCAGACACCCCATCACCGTTTCCCAGCCCGGCCACA
GACCTGTACCAGGTGCCCCAGGGCCTGGAGGCCCTGCCAGGATATTTACCAGGTGCCA
CCTTCTGCCGGGATGGGGCATGACATCTACCAGGTCCCCCGTCCATGGACACACGCAGC
TGGGAGGGCACGAAGCCCCGGCAAAGGTGGTGGTGCCACCCCGTGGGGCAGGGCTAT
GTATACGAGGCCGCCAGCCGGAGCAGGACGAGTACGACATCCCGCGACACCTGTGGCC
CCGGGGCCACAGGACATCTATGATGTGCCCCCGTTCGGGGGCTGCTTCCAGCCAGTAT
GGCCAGGAGGTGTATGACACACCCCATGGCTGTCAAGGGTCCCAATGGCCGAGACCCG
TTGCTGGAGGTGTATGACGTGCCCCCAAGTGTGGAGAAGGGCCTGCCACCGTCCAACCAC
CACGCAGTCTACGACGTTCTCCATCGGTGAGCAAGGATGTGCCCGATGGCCACTGCTG
CGTGAGGAGACCTACGATGTGCCCCCGCCTTCGCCAAGGCCAAGCCCTTGACCCGGCC
CGCACCCCACTGGTACTGGTGCGCCCCCTCCAGACTCCCGCGGGCCGAGGACGTGTAT
GACGTGCCGCCCCCGCCTCTGACCTCTACGACGTGCCCCCTGGCTTGCGGCGCCTGGC
CCGGGCACCCCTGTACGATGTGCCCGTGAACGGGTGCTTCTCCTGAGGTGGCTGATGGT
GGCGTGGTGCACAGTGGTGTGTATGCGGTGCCTCCCCAGCTGAACGTGAAGCCCGGCA
GAGGGCAAGCGCCTGTCCGCTCCAGCACCGGCAGCACACGCAGCAGCCAGTCTGCGTCC
TCCTTGGAGGTGGCAGGGCCGGCCGGGAACCCCTGGAGCTGGAAGTTGCTGTGGAGGCC
CTGGCACGGTGCAGCAGGGTGTGAGCGCCACCGTTGCCACCTTCTGGACTGGCAGGC
AGCGCCGGTGCAGTGGGAGTGGCGTAGCCCTCTGAGCCACAGGAGCCGCTGGTGACG
GACCTGCAGGCTGCTGTGGCCGCTGTCCAGAGTCCCGTCCAGAGCTGTTGGAGTTGCC
CGCAGCGGGTGGCAATGCTGCCACACATCTGACCGTGCCTGCATGCCAAGCTTAGC
CGGCAGCTGCAGAAGATGGAGGACGTGCACCAGACGCTGGTGGCACATGGTCAGGCCCTC
GACGCTGCCCGGGGAGGCTCTGGAGCCACCCCTGAGGACCTGGACCGGCTGGTGGCCTGC
TCGCGGGCTGTGCCGAGGACGCCAAGCAGCTGGCCTCCTTCTGCACGGCAATGCCTCA
CTGCTCTTCAGACGGACCAAGGCCACTGCCCGGGGCTGAGGGGGTGGCACCCCTGCAC
CCCAACCCCACTGACAAGACCAGCAGCATCCAGTACGACCCCTGCCCTCACCCCTAAG
TTCACCTCCCAGGACTCGCCAGATGGGCAGTACGAGAACAGCGAGGGGGGCTGGATGGAG
GACTATGACTACGTCCACCTACAGGGGAAGGAGGATTTGAGAAGACCCAGAAGGAGCTG
CTGGAAAAGGGCAGCATACGCGGCAGGGCAAGAGCCAGCTGGAGTTGCAGCAGCTGAAG
CAGTTTGAACGACTGGAACAGGAGGTGTACGGCCATAGACCAGACCTGGCCAACCTGG
ACGCCAGCCCAACCCCTGGCCCGGGGCAACAGCGGCCTGGGGCCCTCGGACCGGACG
CTGCTGCTCTTCTACCTGGAGCAGTGTGAGGCCAACCTGACCACACTGACCAACGCCGTG
GACGCCTTCTTTACCGCGTGGCCACCAACCAGCCGCCAAGATCTTTGTGGCGCACAGC
AAGTTCGTATCCTCAGCGCCACAAGTGGTGTTCATCGGGACACACTGTCACGGCAG
GCCAAGGTGCTGACGTGCGCAGCCAGGTGACCCACTACAGCAACCTGCTGTGCGACCTC
CTGCGCGGCATCGTGGCCACCACCAAGGCCGCTGCCTTGCAGTACCCATCGCCTTCCGGC
GCCAGGACATGGTGGAGAGGTCAAGGAGCTGGGCCACAGCACCCAGCAGTTCCGCGCG
GTCCTAGGCCAGCTGGCAGCCGCTGA
    
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**Restriction Sites:** Please inquire  
**ACCN:** NM\_001170715

|                               |   |
|-------------------------------|---|
| <b>OTI Disclaimer:</b>        | 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).  |
| <b>OTI Annotation:</b>        | 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.  |
| <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>                | <u><a href="#">NM_001170715.1</a></u> , <u><a href="#">NP_001164186.1</a></u>   |
| <b>RefSeq Size:</b>           | 3238 bp   |
| <b>RefSeq ORF:</b>            | 2667 bp   |
| <b>Locus ID:</b>              | 9564  |
| <b>UniProt ID:</b>            | <u><a href="#">P56945</a></u>   |
| <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   |

**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]

Transcript Variant: This variant (2) has an alternate 5' sequence, as compared to variant 1. The resulting isoform (2) is shorter and has a different N-terminus, as compared to isoform 1.

Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.