

# Product datasheet for RR200632L4

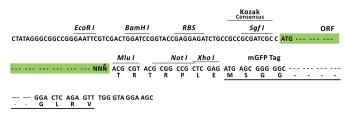
# Bcar3 (NM\_001107722) Rat Tagged Lenti ORF Clone

### **Product data:**

#### OriGene Technologies, Inc.

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Product Type:	Expression Plasmids
Product Name:	Bcar3 (NM_001107722) Rat Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	Bcar3
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RR200632).
<b>Restriction Sites:</b>	Sgfl-Mlul
Cloning Scheme:	Cloning sites used for ORF Shuttling: Sgf I ORF Mlu I GCG ATC GC ATG // NNN ACG CGT



\* The last codon before the Stop codon of the ORF.

ACCN: ORF Size: NM\_001107722 2475 bp



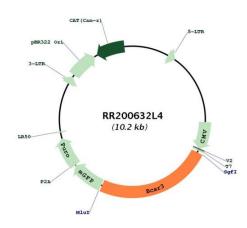
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<b>GRIGENE</b> Bcar3 (NM_001107722) Rat Tagged Lenti ORF Clone – RR200632L4	
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same 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. <u>More info</u>
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:	<ol> <li>Centrifuge at 5,000xg for 5min.</li> <li>Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>Close the tube and incubate for 10 minutes at room temperature.</li> <li>Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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>
RefSeq:	<u>NM 001107722.1, NP 001101192.1</u>
RefSeq Size:	3337 bp
RefSeq ORF:	2478 bp
Locus ID:	310838
UniProt ID:	D3ZAZ5
Cytogenetics:	2q42
Gene Summary:	Acts as an adapter protein downstream of several growth factor receptors to promote cell proliferation, migration, and redistribution of actin fibers (By similarity). Specifically involved in INS/insulin signaling pathway by mediating MAPK1/ERK2-MAPK3/ERK1 activation and DNA synthesis (PubMed:24216110). Promotes insulin-mediated membrane ruffling (PubMed:24216110). In response to vasoconstrictor peptide EDN1, involved in the activation of RAP1 downstream of PTK2B via interaction with phosphorylated BCAR1 (By similarity). Inhibits cell migration and invasion via regulation of TGFB-mediated matrix digestion, actin filament rearrangement, and inhibition of invadopodia activity (By similarity). May inhibit TGFB/SMAD signaling, via facilitating BCAR1 and SMAD2 and/or SMAD3 interaction (By similarity). Regulates EGF-induced DNA synthesis (By similarity). Required for the maintenance of ocular lens morphology and structural integrity, potentially via regulation of focal adhesion complex signaling (By similarity). Acts upstream of PTPRA to regulate the localization of BCAR1 and PTPRA to focal adhesions, via regulation of SRC-mediated phosphorylation of BCAR1

PTPRA (By similarity). Positively regulates integrin-induced tyrosine phosphorylation of BCA (By similarity). Acts as a guanine nucleotide exchange factor (GEF) for small GTPases RALA, RAP1A and RRAS (By similarity). However, in a contrasting study, lacks GEF activity towards RAP1 (By similarity).[UniProtKB/Swiss-Prot Function]

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## **Product images:**



Circular map for RR200632L4

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