

## Product datasheet for **SC114715**

### LARG (ARHGEF12) (NM\_015313) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	LARG (ARHGEF12) (NM_015313) Human Untagged Clone
Tag:	Tag Free
Symbol:	LARG
Synonyms:	LARG; PRO2792
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_015313, the custom clone sequence may differ by one or more nucleotides

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ATGAGTGGCACACAGTCTACTATCACCGACAGGTTTCCCCTCAAAAAACCTATAAGGCATGGAAGTATTT
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AAAGAAGGTGGAGGAAAGTTACACCATTCTTTGCCAAAGGCTGGCTGGATCAGCCCTCACAGACAAGCAC  
TCAGATAAAAAGTTAG

<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for NM_015313 unedited GGTCAAATTTTGTATACGACTCATATAGGGCGGCCGCGATTTCGGCACCAGGTCACCTCGG GCCGCGGGACCTCTCCGCCGGCCAGCGGCTCGTCCCAGCACCGGGAGCCTGGTGAGGG CGGCGAGCACAGAAGGAGCCCCGGGCCCGGACATGGAATCGCGCGAGCCCGCGCGGGA CGGCCGGAGACGCGGCCAACGCTGCGGCCACGAGCAGCCGGCAGCCCCAGATAGAGAGCC GGGAGGGAGGGCCCCGGCCCTTGCCGCGCGGGGAGTTCGAGGCCCGGAGACTCCGGGTCC AGGAGCCGACACCCGTCGCTGAGCTGATCCCGCCAGCCCCGGCGGGAGTCCCAGGTCC CCTTCCCAGTGCAGCGGATTTCCCTCTCTGAGGAAGTTTATCCTTGTGCCTTCTGGAGG ATTTCTCTCTAGCTCGACTCACTCTGGACTGACTCGCTCCTGGCTTTTCTCAGTTCGTTT TGGGAGATAAATTGTTTTGCTCCAAGCCGCATCCGTTGACCCCTTACAGTCGGATGGTCT AGATGACTGAATGGAGTTTTGAGTTGGACTTTTGTGCCCTGACGGAGTTGGCCTGATC CCAGAGCACTGGGGTGGGGAGGGAGGTGTTACTGTAAAATGCAAGTTGGATAAAAGGAG GACCTCTCGCAAGGGCCCCAATGAGTGGCACACAGTCTACTATCACCGACAGGTTTNC CTCAAAAAACCTATNAGGCATGGGAAGTATTTGAACCGAGAGTACCAACAGATNAGAA GCAGAAAAGTGAGCGCATTGCATCACATGATTNTGACCCACAGATAGCTCCTNCAAGAG ACANAGTCTAGTTCAGAGGAGAGTAGATCCGAGAATATGGGTCTGTTACGCGNTGCGTAA TCATCCAGAAAGATGACATGGATTTGGGCTGACCGTCAGTGGAGACATCCN
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_015313
<b>Insert Size:</b>	5000 bp
<b>OTI Disclaimer:</b>	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.  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>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_015313.1</a> , <a href="#">NP_056128.1</a>
<b>RefSeq Size:</b>	9501 bp

RefSeq ORF:	4635 bp
Locus ID:	23365
UniProt ID:	<u>Q9NZN5</u>
Cytogenetics:	11q23.3
Domains:	RhoGEF, PDZ, PH
Protein Pathways:	Axon guidance, Regulation of actin cytoskeleton, Vascular smooth muscle contraction

**Gene Summary:** Rho GTPases play a fundamental role in numerous cellular processes that are initiated by extracellular stimuli working through G protein-coupled receptors. The encoded protein may form a complex with G proteins and stimulate Rho-dependent signals. This protein has been observed to form a myeloid/lymphoid fusion partner in acute myeloid leukemia. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2014]  
Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1).