

Product datasheet for **SC310095**

RICH2 (ARHGAP44) (NM_014859) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RICH2 (ARHGAP44) (NM_014859) Human Untagged Clone
Tag:	Tag Free
Symbol:	RICH2
Synonyms:	NPC-A-10; RICH2
Vector:	<u>pCMV6 series</u>



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Fully Sequenced ORF: >NCBI ORF sequence for NM_014859, the custom clone sequence may differ by one or more nucleotides

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ATGAAGAAGCAGTTCAATCGCATGCGCCAGCTGGCCAACCAGACGGTGGGCAGGGCTGAA
AAGACAGAAGTTTTGAGTGAAGACCTTCTTCAGGTGGAGAAGCGTCTGGAGCTGGTGAAA
CAGGTGTCCACAGCACGCAAGAAGCTCACCAGCATGTCTGCAGGGCCAGCAAGGGGCA
GAGGCTGACAAGCGCTCCAAAAAGTTGCCTTTGACAACACTGGCTCAGTGTCTGATGGAG
GGGTGAGTATCCTGGGAGATGACACACTTCTTGGGAAGATGCTGAAACTCTGTGGAGAG
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CACTTAGCCAAGTTGGTCTGGACATGGATTCTCACGAACCAGGTGGCAGCAGACTTCC
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GAAGAAATGGAAGAGGCTGCCAACAGAGTGGAGATTTGCAGGGACCAGCTCTCAGCTGAT
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GTGCAAGCTGAATACCACAGGAAGTCCCTGACACTATTGCAGGCTGTATTGCCTCAGATC
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CTCACCATCAGCGGCCGGGAGATCGCCTTCCCCATCGAGGCGTGTGTGACCATGTGCTT
GAGTGTGGGATGCAGGAGGAGGGACTCTCCGAGTAGCCCTCTGCCTCCAAACTGAAG
AAGCTGAAAGCGGCCCTGGACTGCTGCGTGGTGGATGTGCAGGAGTACTCGGCAGACCCC
CACGCAATTGCAGGAGCTTTGAAATCTTACCTCCGAGAGTTGCCAGAACCTCTTATGACC
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TTGATAAAATTTTATCCAAGCTGTGAGAATATCAAGATGTAAACAAGATGACTCCAGT
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GAGATGATGACCACAGTGTGCTGCAAAATTGTTGGGATCATTGAACCTATCATCCAGCAT
GCAGACTGGTTCTTCCCTGGGAGATAGAGTTCAACATTACTGGCAATTATGGGAGTCCA
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GACCGGCCAGCCGAGCAGGCCCGCCGGCCCTCAGCGTCGCCACGGATAATATGATG
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GACACAACTGGGTGGCTCGAAGAGGCTCCTCGGCCGGTCGGAAGTGTCTGCGCCCCG
CCCTCCATGCAGCCTCCCGCCCCCGCCGAGCTGGCTGCGCCCTGCCTTCGCCGCTG
CCGGAGCAGCCCTGGACAGCCCGCGGCCCGCGCTCTCTCCATCCGGCTGGGCCTC
CAGCCTGGGCCCCGAGCGACACAGCACAACAAAAGCAAGGAACCTTCTCCAGGCTCTGCA
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CAACCTGGAGCTCAGCCGGGCGCCAGCCCCAGCCCCAGCCAGCCGCTGCAGACCAGAGT
CCTCACACCTCCGGAAGTTTCAAAGAAGCTGGCACCATTCCACCCAAGGTCCCTTT
GGCCAGCCGGGGCTATGGCAGACAGTCCGCTGGCCAGCCGTCCCCAGTCAGCTGTCC
CCCACCCCGCCAGCACCCCGTCACCTATGGACTGAGTACCCTCAGGGGTACTCCTTG
GCCTCGGGCCAGCTCTCCCCAGCTGCAGCTCCTCCCCTGGCCTCTCCTTGTCTTTACA
AGCACTTTGAGCAAATCGCGGCCACTCCTAAGCCGCGACAGAGACCTACTCTGCCGCT
CCTCAGCCTCCACAGTAAACCTCTCGGCCTCTAGTCCACAGTCCACGGAGGCCCCATG
CTAGATGGCATGTCCCCTGGGAAAGCATGTCTACAGATCTTGTCCACTTTGATATTCCC
TCGATCCACATAGAGCTCGGGTCGACGCTCCGCTGAGTCCCCTGGAGCACATGCGGCGA
CACTCAGTAACTGACAAGAGGGACTCGGAGGAGGAGTCTGAGAGCACCGCCCTCTGA

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Restriction Sites: Please inquire

ACCN: NM_014859

OTI Disclaimer: 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).

OTI Annotation:	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.
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_014859.3 , NP_055674.3
RefSeq Size:	4227 bp
RefSeq ORF:	2457 bp
Locus ID:	9912
UniProt ID:	Q17R89
Cytogenetics:	17p12
Domains:	RhoGAP, BAR
Gene Summary:	GTPase-activating protein (GAP) that stimulates the GTPase activity of Rho-type GTPases. Thereby, controls Rho-type GTPases cycling between their active GTP-bound and inactive GDP-bound states. Acts as a GAP at least for CDC42 and RAC1 (PubMed:11431473). In neurons, is involved in dendritic spine formation and synaptic plasticity in a specific RAC1-GAP activity (By similarity). Limits the initiation of exploratory dendritic filopodia. Recruited to actin-patches that seed filopodia, binds specifically to plasma membrane sections that are deformed inward by acto-myosin mediated contractile forces. Acts through GAP activity on RAC1 to reduce actin polymerization necessary for filopodia formation (By similarity). In association with SHANK3, promotes GRIA1 exocytosis from recycling endosomes and spine morphological changes associated to long-term potentiation (By similarity).[UniProtKB/Swiss-Prot Function]