

Product datasheet for **SC308747**

p114RhoGEF (ARHGEF18) (NM_015318) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	p114RhoGEF (ARHGEF18) (NM_015318) Human Untagged Clone
Tag:	Tag Free
Symbol:	p114RhoGEF
Synonyms:	P114-RhoGEF; p114RhoGEF; RP78; SA-RhoGEF
Mammalian Cell Selection:	Neomycin
Vector:	<u>PCMV6-Neo</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_015318 edited
 ATGACGGTCTCTCAGAAAGGGGGTCCCCAGCCAACACCGAGCCCGGCTGGCCCTGGGACG
 CAACTCGGACCAATCACAGGAGAGATGGATGAAGCCGATTCTGCGTTTTTAAAAATTAAG
 CAGACAGCTGATGACTCTGTCCCTTACATCTCCAAACACCGAGTCCATTTTTGTAGAA
 GATCCCTACACCGCCTCGCTGAGGAGTGAGATTGAGTCAGACGGCCACGAGTTTGAAGCT
 GAGTCTGGAGCCTCGCCGTGGATGCAGCCTACGCCAAGAAGCAAAAGAGGGAGGTGGT
 AAAAGACAAGATGTCCTTATGAGCTGATGCAGACAGAGGTGCACCACGTGCGGACGCTC
 AAGATCATGCTGAAGGTGACTCCAGGGCCCTGCAGGAGGAGCTGCAGTTCAGCAGCAAG
 GCCATTGGCCGCTCTTCCCATGCGCTGACGACCTGCTGGAGACGCACAGCCACTTCCTC
 GCTCGGCTCAAGGAGCGCCAGGAGTCCCTGGAGGAGGCAGTGACCGGAATTATGTC
 ATCCAGAAAATCGGCGACCTCCTGGTTCAGCAGTTTTTCAGGTGAAAATGGGGAGAGAATG
 AAAGAAAAGTACGGTGTGTTTTGTAGTGCCACAATGAAGCTGTTAGTCATTACAAGTTG
 CTGCTTACGAAAAACAAGAAATTTCAAACTTGATCAAGAAAATTGGCAACTTCTCCATC
 GTGCGGGCGCTTGGCGTGCAAGGAGTGCATTCTCCTGGTTACACAACGCATAACCAAAATC
 CAGTGTGTTGGAGCGCATCATCCAGAACACGGAAGCTGGCACTGAGGACTATGAAGAC
 CTGACCCAGGCCCTTGAACCTCATCAAAGATATCATCTACAAGTGGACGCCAAGGTCAGT
 GAGTGTGAGAAGGGCCAGCGCCTCAGGGAGATCGCAGGGAAGATGGACCTGAAGTCTTCC
 AGCAAACCTCAAGAACGGGCTCACCTTCCGCAAGGAAGACATGCTTCAGCGGCAGTCCAC
 CTGGAGGGCATGCTATGCTGGAAGACCACATCAGGGCGCTTGAAGATATCCTGGCTATC
 CTGCTGACCGACGTACTTTTGTGCTACAAGAAAAGATCAGAAAATACGTCTTTGCTTCT
 GTGGACTCAAAGCCACCCGTCATCTCGTTACAAAAGCTCATCGTGAGGGAAGTGGCCAAC
 GAGGAGAAAGCGATGTTTCTGATCAGCGCCTCCTTGAAGGGCCGGAGATGTATGAAATC
 TACACGAGCTCAAAGAGGACAGGAACGCCTGGATGGCCACATCCAAAGGGCTGTGGAG
 AGCTGCCCTGACGAGGAGGAGGGGCCCTTCAGCCTGCCCGAAGAGGAAAGGAAGTGGTC
 GAGGCCCGCGCCACGAGACTCCGGGACTTTCAAGAGCGGTTGAGCATGAAAGACCAGCTG
 ATCGCACAGAGCCTCTAGAGAAAACAGCAGATCTACCTGGAGATGGCCGAGATGGCGGCG
 CTGAAGACCTGCCCCAGCCCCAGGCCTATTCCGTGGAGGGGACCCATCCGAGACCTG



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CAGGGGGAGCTAATTCTCAAGTCGGCCATGAGCGAGATCGAGGGCATCCAGAGCCTGATC
 TGCAGGCAGCTGGGCAGCGCCAACGGCCAGGCGGAAGACGGAGGCAGCTCCACAGGCCCG
 CCCAGGAGGGCTGAGACCTTCGCGGGCTACGACTGCACAAACAGCCCCACCAAGAATGGC
 AGTTTCAAGAAGAAAGTCAGCAGCACTGACCCAGGCCCGGAGACTGGCGAGGCCCCCA
 AACAGCCCGGACTTGAAGCTCAGTGACAGTGACATTCTGGGAGCTCTGAGGAATCGCCG
 CAGGTGGTGGAGGCGCCAGGCACGGAATCCGATCCCCGTCTGCCACCGTCTGGAGTCG
 GAGCTTGTCCAGCGGATCCAGACACTGTCCCAGTGTCTCTGAACCTTCAGGCGTAATC
 GCCCACCAGGACAGCTATGTGGAGACGCAGCGGGCTGCCATCCAGGAGCGGGAGAAGCAG
 TTCCGGCTGCAGTCGACGCTGGGAACCTGCTGCTGGAGCAGGAGCGGCAACGCAACTTC
 GAGAAGCAGCGGGAGGAGCGCGGCCCTGGAGAAGCTGCAGAGCCAGCTGCGGCACGAG
 CAGCAGCGCTGGGAGCGCGAGCGCCAGTGGCAGCACCAGGAGCTGGAGCGTGGGGCGCG
 CGGCTGCAGGAGCGGAGGGCGAGGCGCGGCGAGCTACGCGAGCGGCTGGAGCAGGAGCGG
 GCCGAGCTGGAGCGCCAGCGCCAGGCCTACCAGCAGCACTGGAGCGGCTGCGCGAGGCC
 CAGCGTGCCGTGGAGCGCGAGCGGGAGCGCCTGGAGCTGTGCGCCGCTCAAGAAGCAG
 AACACCGCGCCAGGCGCGTGCCTGCCCGACACACTGGCCGAGGCCAGCCCCAAGCCAC
 CCTCCAGCTTCAACGGGAAGGGCTGGAGGGCCCTCGTGTGAGCATGTGCCATCCGGC
 GTGGGGCCAGAGTACGCAGAGCGCCCGAGGTGGCTCGCCGGGACAGCGCCCCACCGAG
 AACCGGCTGGCCAAGAGCGATGTGCCATCCAGCTGTGACGCGCCACCAACAGTTCCAG
 AGGCAGGCGGCCGTGCAGCAGCAGATCCCACCAAGCTGGCGGCTCCACCAAGGGTGGC
 AAGGACAAGGGCGGAAGAGCAGGGGCTCTCAGCGCTGGGAGAGCTCAGCGTCTCTCGAC
 CTGAAGCAGCAGCTGTGCTCAACAAGCTCATGGGAAAGATGAGAGCACCTCACGGAAC
 CGCCGCTCGTGAGCCCTATCTGCCCGGACAGACAGTCTGCGCCCCACCAGACCCT
 GGCTTCCCGCCCGAGCCACCGCCAGCTGACAGCCCTCCGAGGGCTTCTCTCTCAAG
 GCGGGGGCACAGCCCTCTGCCCGGCCCCAGCTCCCTCGCCACTGCGGGCCACACCA
 CTCAGCGCCAAGGAGGACGCCAGCAAAGAAGACGTCATCTTCTTCTAA

- Restriction Sites:** Please inquire
- ACCN:** NM_015318
- Insert Size:** 3000 bp
- 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_015318.2](#), [NP_056133.2](#)

RefSeq Size: 5386 bp

RefSeq ORF: 3048 bp

Locus ID: 23370

UniProt ID: [Q6ZSZ5](#)

Cytogenetics: 19p13.2

Domains: RhoGEF, PH

Gene Summary: Rho GTPases are GTP binding proteins that regulate a wide spectrum of cellular functions. These cellular processes include cytoskeletal rearrangements, gene transcription, cell growth and motility. Activation of Rho GTPases is under the direct control of guanine nucleotide exchange factors (GEFs). The protein encoded by this gene is a guanine nucleotide exchange factor and belongs to the Rho GTPase GEF family. Family members share a common feature, a Dbl (DH) homology domain followed by a pleckstrin (PH) homology domain. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Nov 2018]

Transcript Variant: This variant (1) represents the shorter transcript, and encodes the shorter isoform (a).