

5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_001665 unedited NGGGCTTGTCCAGAATTTTGTNATACGACTCACTATAGGCGGCCGGAATTCGCACGAGG GGCACCAGGTCACTGCAGCCAGAGGGTCCAGAAGAGAGAGGAGGCACTGCCTCCACTACA GCAACTGCACCCACGATGCAGAGCATCAAGTGCCTGGTGGTGGGTGATGGGGCTGTGGGC AAGACGTGCCTGCTCATCTGCTACACAATAACGCTTTCCCAAAGAGTACATCCCCACC GTGTTTCGACAATTACAGCGCGCAGAGCGAGTTGACGGGCGCACAGTGAACCTGAACCTG TGGGACACTGCGGGCCAGGAGGAGTATGACCGCCTCCGTACACTCTCCTACCCTCAGACC AACGTTTTTCGTACATCTGTTTCTCCATTGCCAGTCCGCCGTCTATGAGAACGTGCGGCAC AAGTGGCATCCAGAGGTGTGCCACCACTGCCCTGATGTGCCCATCCTGCTGGTGGGCACC AAGAAGGACCTGAGAGCCAGCCTGACACCCTACGGCGCCTCAAGGAGCAGGGCCAGGCG CCCATCACACCGCAGCAGGGCCAGGCACTGGCCAAGCAGATCCACGCTGTGCGCTACCTC GAATGCTCAGCCCTGCAACAGGATGGTGTCAAGGAAGTGTTCGCCGAGGCTGTCCGGCT GTGCTCAACCCACGCCGATCAAGCGTGGGCGGTCTGCATCCTCTTGTGACCCTGGCAC TTGGCTTGGAGGCTGCCCTGCCCTCCCCACCAGTTGTGCTTGGTGCCTTGTCCGCC TCAGCTGTGCCTAAGGACTAATTCTGGCACCCCTTTCCNAGGGGTTCCCTGAATGCCT TTNTCTGTGAGTGCTTTTTTCTCTTAAGGAGCCTGCANAAAAGGGGGCTTGGCTCTGCC</p>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_001665 unedited TANGATCGAGTTTTTTTTTTTTTTTTTTTGGAGACGGAGTTTTATTGATGCTGATGGGG TAGGAAAGGTCCCAAGAAGTGGGGCTGAGTCAGTCAGCAAATGCGTAAGGCCTATGCA CAGAGGAGCAAGTTAGGGCACATTCACCTTCTCAAGATTCTGTGGCTCCCTCATTGGAGA AAGGAGAGAGCATCTTGGGGCGCAATTCNAGATCAGCGAGGGCATAAGTTANAGATGG CTGAAAGCCNCTACCCTGAGGCGCACACCATTAGCAGCNACAAGTGTGTTGAAAGCTG GATGAACTGGTCCAGTACGGAAAATGGGAAGGGGCACCTGGGTTGGCCCTGGGGGAGGG GTCCAACCTGGCTTGGATGAACCCATGAAATTCCTTGGTTTCCACAAAGGGGGCCAG ACCCAATACCCCTTTTTTGGGGCTCCTTAGGGGAAAAAGGCCCCCAAGAAAAAGTTTC AGGGACCCCGGGAAGGGGGGCCAATTTTCCCTTAGGGCACCTTGGGGGGGAAGGCCCG GGCAAATTGTGGGGGGGGGGGGGGGTANCCCTCAACCCCTGGGGGGGATTAATAAAGT TTCAAAAAGAAAACCTTTTATCCCGGGGGGGGTGCCCCCGGGGGTTTGGGAAAA ACTTTTTGCGGGCCCTTGGTTGTTTCGGGGTAACCTCCAGGGGAACCCACGGGGGATA TAACACTAGACAGGGGCCCGGGCCCGGGGCGGGTA</p>
Restriction Sites:	NotI-NotI
ACCN:	NM_001665
Insert Size:	1350 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).
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 style="list-style-type: none"> 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_001665.2, NP_001656.2](#)
RefSeq Size: 1286 bp
RefSeq ORF: 576 bp
Locus ID: 391
UniProt ID: [P84095](#)
Cytogenetics: 11p15.4
Domains: ras

Gene Summary: This gene encodes a member of the Rho family of small GTPases, which cycle between inactive GDP-bound and active GTP-bound states and function as molecular switches in signal transduction cascades. Rho proteins promote reorganization of the actin cytoskeleton and regulate cell shape, attachment, and motility. The encoded protein facilitates translocation of a functional guanine nucleotide exchange factor (GEF) complex from the cytoplasm to the plasma membrane where ras-related C3 botulinum toxin substrate 1 is activated to promote lamellipodium formation and cell migration. Two related pseudogene have been identified on chromosomes 20 and X. [provided by RefSeq, Aug 2011]