

## Product datasheet for MC211563

## Rhoh (NM\_001081105) Mouse Untagged Clone

## **Product data:**

## OriGene Technologies, Inc.

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Product Type:	Expression Plasmids
Product Name:	Rhoh (NM_001081105) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Rhoh
Synonyms:	5830400A04Rik; Arhh; AU019774
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC211563 representing NM_001081105 Red=Cloning site Blue=ORF
	TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCC <mark>GCGATCGC</mark> C
	ATGCTGAGCTCAATCAAGTGCGTGCTGGTAGGGGACAGTGCTGTGGGGAAAAACCTCACTGTTGGTGCGCT TCACCTCTGAGACCTTCCCGGAGGCCTACAAACCCACGGTGTACGAGAATACGGGTGTAGACGTCTTCAT GGATGGCATCCAGATCAGCCTGGGTCTCTGGGACACTGCCGGCAACGACGCCTTCAGAAGTATCCGGCCC CTGTCCTACCAGCAGGCAGACGTGGTACTGATGTGCTACTCTGTGGCCAACCATAACTCGTTCCTGAACT TGAAGAACAAATGGATTAGTGAGATCAGGAGCAACCTACCCTGTACCCCGGTGCTGGTTGTGGCCACACA GACGGACCAGAGAGAGGTGGGACCTCACAGGGCTTCCTGCATCAATGCCATAGAAGGAAG
	ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA
<b>Restriction Sites:</b>	Sgfl-Mlul
ACCN:	NM_001081105
Insert Size:	576 bp



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<b>GRIGENE</b> Rhoh (I	NM_001081105) Mouse Untagged Clone – MC211563
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> <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>BC094937, AAH94937</u>
RefSeq Size:	1460 bp
RefSeq ORF:	576 bp
Locus ID:	74734
UniProt ID:	<u>Q9D3G9</u>
Cytogenetics:	5 C3.1
Gene Summary:	Binds GTP but lacks intrinsic GTPase activity and is resistant to Rho-specific GTPase-activating proteins. Inhibits the activation of NF-kappa-B by TNF and IKKB and the activation of CRK/p38 by TNF. Inhibits activities of RAC1, RHOA and CDC42. Negatively regulates leukotriene production in neutrophils (By similarity). Negative regulator of hematopoietic progenitor cell proliferation, survival and migration. Critical regulator of thymocyte development and T-cell antigen receptor (TCR) signaling by mediating recruitment and activation of ZAP70. Required for phosphorylation of CD3Z, membrane translocation of ZAP70 and subsequent activation of the ZAP70-mediated pathways. Essential for efficient beta-selection and positive selection by promoting the ZAP70-dependent phosphorylation of the LAT signalosome during pre-TCR and TCR signaling. Crucial for thymocyte maturation during DN3 to DN4 transition and during positive selection. Plays critical roles in mast cell function by facilitating phosphorylation of SYK in Fc epsilon RI-mediated signal transduction. Essential for the phosphorylation of LAT, LCP2, PLCG1 and PLCG2 and for Ca(2+) mobilization in mast cells.[UniProtKB/Swiss-Prot Function]

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