

Product datasheet for **MG223809**

Rhoh (NM_001081105) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Rhoh (NM_001081105) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Rhoh
Synonyms: 5830400A04Rik; Arhh; AU019774
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG223809 representing NM_001081105
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCTGAGCTCAATCAAGTGCCTGCTGGTAGGGGACAGTCTGTGGGAAAACCTCACTGTTGGTGCCT
 TCACCTCTGAGACCTCCCGGAGGCCTACAAACCCACGGTGTACGAGAATACGGGTGTAGACGTCTTCAT
 GGATGGCATCCAGATCAGCCTGGTCTCTGGGACTGCCGCAACGACGCCTTCAGAAGTATCCGGCCC
 CTGTCCTACCAGCAGGCAGACGTGGTACTGATGTGCTACTCTGTGGCCAACCATAACTCGTTCCTGA
 TGAAGAACAATGGATTAGTGAGATCAGGAGCAACCTACCTGTACCCCGGTGCTGGTTGTGGCCACACA
 GACGGACCAGAGAGAGGTGGGACCTCACAGGGCTTCTGCATCAATGCCATAGAAGGGAAGAGACTTGCC
 CAGGATGTGAGAGCCAAGGGCTACCTGGAGTGCTCAGCCCTCAGCAACCGGGGAGTACAGCAGGTATTTG
 AATGTGCTGTCCGAACAGCTGTCAACCAGGCCAGGAGGCCAAACAGAAGGAAGCTGTTCTCCATCAATGA
 ATGCAAGATCTTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG223809 representing NM_001081105
 Red=Cloning site Green=Tags(s)

MLSSIKCVLVGDSAVGKTSLLVRFTSETFPEAYKPTVYENTGVDVFMDCIQLSLGLWDTAGNDAFRSIRP
 LSYQQADVVLMCYSVANHNSFLNLKKNWISEIRSNLPCTPVLVVATQTDQREVGPFRASCINAIEGKRLA
 QDVRAKGYLECSALSNRGVQQVFECVAVRTAVNQARRRRNRKLFSEINECKIF

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



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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_001081105.2](#)

RefSeq Size: 4960 bp

RefSeq ORF: 576 bp

Locus ID: 74734

UniProt ID: [Q9D3G9](#)

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]