

Product datasheet for MC206577

Rab13 (BC027214) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Rab13 (BC027214) Mouse Untagged Clone

Tag: Tag Free Symbol: Rab13

Synonyms: 0610007N03Rik; B230212B15Rik

Mammalian Cell

Selection:

Neomycin

Vector: PCMV6-Kan/Neo (PCMV6KN)

E. coli Selection: Kanamycin (25 ug/mL)

Fully Sequenced ORF: >BC027214

TCTTCCCGACCCCTCCCCGGCGCCCCCAGTGTCCGCCATGGCCAAAGCCTACGACCACCTCTTCAAGTT GCTGCTCATCGGGGACTCGGGGGTGGGCAAGACTTGTCTGATCATTCGCTTTGCAGAGGACAACTTCAAC AGCACTTACATCTCTACCATCGGAATTGATTTCAAGATCCGAACCGTGGACATAGAGGGGAAGAGGATCA AACTGCAAGTGTGGGACACGGCTGGCCAAGAACGATTCAAGACAATAACTACCGCCTATTACCGTGGAGC CATGGGCATTATCCTCGTATATGACATCACAGATGAGAAATCCTTCGAGAATATTCAGAACTGGATGAAA AGCATCAAAGAGAATGCCTCTGCGGGAGTGGAGCGCCTCCTGCTGGGAAACAAGTGTGACATGGAGGCCA AGCGGCAGGTGCAGAGAGAGCAGGCGGAGAAGTTGGCTCGAGAGCACAGAATCCGATTTTTTGAGACGAG TGCCAAATCCAGTGTGAATGTGGATGAGGCTTTCAGTTCCCTGGCCCGTGACATCTTGCTCAAGACAGGA GGCCGGAGATCGGGAACCAACAGTAAGCCCTCAAGCACTGGCCTGAAAACATCTGACAAGAAGAAGAAGAACA AGTGCTTGTTAGGCTGAGAGCATTTCTTGCCTCCTATTCACCCTGAACCTGGAGGCTAGACCTGAGGGAG TCGGACTGAGGGATTGCAGATGGGAGAACTGTGGTGGCACCTCAAGGGGAGATGAGGGGAATAAGGAGAC GAAGGGATTTGAGAAGAGGAAAGGAAGAAGTGAATGGCTCAGGCCTTGGACAGTCCAACATTAAAGT

Restriction Sites: EcoRI-Notl
ACCN: BC027214
Insert Size: 609 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).



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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: <u>BC027214</u>, <u>AAH27214</u>

3 39.21 cM

RefSeq Size:1118 bpRefSeq ORF:609 bpLocus ID:68328

Gene Summary:

Cytogenetics:

The small GTPases Rab are key regulators of intracellular membrane trafficking, from the formation of transport vesicles to their fusion with membranes. Rabs cycle between an inactive GDP-bound form and an active GTP-bound form that is able to recruit to membranes different sets of downstream effectors directly responsible for vesicle formation, movement, tethering and fusion. That Rab is involved in endocytic recycling and regulates the transport to the plasma membrane of transmembrane proteins like the tight junction protein OCLN/occludin. Thereby, it regulates the assembly and the activity of tight junctions. Moreover, it may also regulate tight junction assembly by activating the PKA signaling pathway and by reorganizing the actin cytoskeleton through the activation of the downstream effectors PRKACA and MICALL2 respectively. Through its role in tight junction assembly, may play a role in the establishment of Sertoli cell barrier. Plays also a role in angiogenesis through regulation of endothelial cells chemotaxis. Also involved in neurite outgrowth. Has also been proposed to play a role in post-Golgi membrane trafficking from the TGN to the recycling endosome. Finally, it has been involved in insulin-induced transport to the plasma membrane of the glucose transporter GLUT4 and therefore may play a role in glucose homeostasis.[UniProtKB/Swiss-Prot Function]