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Product datasheet for MC225742

Rab13 (NM_001293741) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rab13 (NM_001293741) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Rab13
Synonyms:	0610007N03Rik; B230212B15Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC225742 representing NM_001293741 Red=Cloning site Blue=ORF Orange=Stop codon TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGGCATTATCCTCGTATATGACATCACAGATGAGAAATCCTTCGAGAATATTCAGAACTGGATGAAAA GCATCAAAGAGAATGCCTCTGCGGGAGTGGAGCGCCTCCTGCTGGGAAACAAGTGTGACATGGAGGCCAA GCGGCAGGTGCAGAGAGAGCAGGCGGAGAAGTTGGCTCGAGAGCACAGAATCCGATTTTTTGAGACGAGT GCCAAATCCAGTGTGAATGTGGATGAGGCTTTCAGTTCCCTGGCCCGTGACATCTTGCTCAAGACAGGAG GCCGGAGATCGGGAACCAACAGTAAGCCCTCAAGCACTGGCCTGAAAACATCTGACAAGAAGAAGAACAA GTGCTTGTTAGGCTGA ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA
Restriction Sites:	SgfI-MluI
ACCN:	NM_001293741
Insert Size:	366 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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OTI Annotation:	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_001293741.1, NP_001280670.1
RefSeq Size:	1417 bp
RefSeq ORF:	366 bp
Locus ID:	68328
Cytogenetics:	3 39.21 cM
Gene Summary:	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] Transcript Variant: This variant (2) represents the use of an alternate promoter, has a different 5' structure, and uses a downstream start codon compared to variant 1. The encoded isoform (2) has a shorter N-terminus compared to isoform 1.