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Product datasheet for MC203719

Arhgef1 (NM_008488) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Arhgef1 (NM_008488) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Arhgef1
Synonyms:	Lbcl2; Lsc
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)

Fully Sequenced ORF:

>BC012488
CGGACGCGTGGGCTCTGCGGCACGGGTGGGGGAACCTGGAGCTCGAGCGCGGAGGCTTCGGTTCCTGAGG
CTGCAGTGGCTTGCTTCTCTTCCCATCCGACAGCCCGGCGGAGTCCTGGAGATGGGAGAAGTCGCCGGAG
GGGCGGCCCCAGGGCCTCCCCGGTCTGGCCTGGTGTCCATCATCATCGGGGCGGAGGATGAGGATTTTGA
GAACGAGCTGGAGGCGAACTCAGAAGATCAAAACAGCCAGTTCCAGAGCCTAGAGCAAGTGAAGCGCCGC
CCTGCCCACCTCATGGCCCTCCTGCAGCATGTGGCCCTGCAGTTCGAGCCAGGACCACTGCTCTGCTGCC
TGCATGCAGACATGCTGAGCTCTCTGGGCCCCAAAGAAGCCAAGAAGGCCTTCCTTGACTTCTATCACAG
TTTCCTGGAGAAGACTGCGGTTCTACGGGTGCCGGTCCCTCCCAGTGTCGCTTTTGAACTTGATCGTACT
CGACCTGATCTGATCTCTGAGGATGTCCAGAGGCGGTTCATACAAGAGGTGGTGCAGAGCCAGCAGGCAG
CCGTGAGCCGTCAGCTAGAGGACTTCCGCTCTAAGCGGCTCATGGGCATGACGCCCTGGGAGCAGGAACT
GAGCCTGCTGGAGCCCTGGATTGGGAAAGACCGAGGCAACTATGAGGCCCGGGAGCGGCATGTTGCGGAG
CGGCTGCTGTCCCACCTGGAGGAGACCCAGCATACCATCTCTACAGATGAAGAGAAAAGTGCTGCTGTGG
TCACTGCCATCAGCCTGTATATGCGCCACCTTGGAGTCCGGACCAAGAGTGGGGACAAGAAGTCGGGAAG
GAACTTCTTCCGGAAAAAGGTGATGGGGAATCGGAGGTCAGACGAACCCCCAAAGACAAAGAAAGGGCTG
AGCAGTATCCTAGATCCTGCACGTTGGAACCGGGGAGAGCCATCCGCTCCAGATTGTCGACATCTAAAGG
TCGAGGCTGATGCAGAGAAGCCAGGCCCTGCAGACCGGAAGGGAGGCCTGGGTATGTCTTCTCGGGACAG
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TCCCGGGAACCAGGCGTGGATACCCCGCAGGAGCCAGGGGATACACCCCCACAGGGCCCTACCAGCCTGG
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GGAGCCAGGACGGTCAGGCCTGGAACTGGAACCAGAAGAACCTCCTGGGTGGAGGGAACTCGTGCCCCCA
GACACCCTGCTCAGTCTGCCCAAGAGCCAAGTGAAGCGGCAAGAGGTCATCAGCGAGCTGCTCGTGACTG
AGGCAGCTCACGTGCGCATGCTACGGGTACTGCATGACCTCTTCTACCAGCCCATGGCGGATGGAGGCTT
CTTCCCTCTGGACGAGCTGCAGAACATCTTCCCGAGCCTGGATGAGCTCATCGAGGTGCACTCCCTGTTC
CTCGATCGCTTGATGAAGCGGAGACAAGAGAGTGGCTACCTCATTGAGGAGATCGGCGATGTGCTACTGG
CCCGGTTCGATGGTGCTGAGGGCTCATGGTTCCAGAAGATCTCCTCCCGCTTCTGCAGCCGCCAGTCGTT
CGCTCTAGAGCAGCTCAAAGCCAAGCAGCGCAAGGAGCCTCGGTTCTGTGCCTTTGTGCAGGAAGCTGAG
AGCCGCCCGAGATGCCGGCGCCTACAGTTAAAGGACATGATCCCCACTGAGATGCAGCGACTGACCAAGT
ACCCACTGCTGCTACAGAGCATCGGGCAGAACACAGAGGAGTCTACAGAACGAGGGAAAGTGGAGCTTGC
AGCTGAGTGCTGCCGGGAGATTCTGCACCATGTCAATCAAGCCGTCCGTGACATGGAGGACCTGCTGCGG
CTCAAGGATTACCAGCGGCGCCTGGACTTGACTCACCTACGGCAGAGCAGTGACCCTATGCTGAGCGAGT
TCAAGAACCTGGACATCACTAAGAAGAAGTTGGTCCATGAAGGCCCCCTCACGTGGCGAGTGACCAAAGA
CAAAGCTATAGAAGTGCACGTGCTCTTGCTGGACGACCTGCTGCTGCTGCTCCAGCGCCAGGACGAGAGG
CTGCTGCTCAAGTCCCACAGCCGGACGCTGACACCTACCCCCGATGGCAAGACCATGCTGCGGCCGGTGC
TCCGGCTCACCTCTGCCATGACCCGAGAGGTGGCCACTGATCACAAAGCTTTCTACGTCATTTTTACCTG
GGACCAGGAGGCCCAGATATATGAGCTGGTGGCACAGACATCTTCGGAACGCAAAAACTGGTGTAACCTC
ATCACTGAGACTGCTGGATCCCTGAAGGTCCCTGCCCCTGCCTCCCGCCTCAAACCCCGGCCCAGCCCAA
GCAGCATCCGAGAACCCCTGCTCAGCAGCTCTGAGAATGGCACTGGAGGCGCAGAGATGGCTCCAGCTGA
TGCCAGGACAGAGCGGCTCCTCAATGACCTCCTGCCCTTCTGCAGACCAGGCCCAGAGGGCCAGCTTGCT
GCCACAGCCCTTCAGAAAGTACTGTCCCTGAAGCAGATCCTGCTAAGCACTGAGGAAGACAGTGGAGCGG
GGCCTCCCCGCGATGGGGATGGGGTGCCTGGTGGTAGGGCCCCCGGCCCAGTGCACACCCAGGAGATTGA
GGAAAACTTGCTTAGCTTAGAGGTGGCCATCAGACAACTGGAGGAGTTGGAAGAGGAATTTTGTCGCCTA
AGACCCCTCCTGTCCCAGCTTGGGGGGACTCTGTCCCCCAACCTGGCTGCACCTGAACGCTCTGCTCAGA
CAGGCCTTTCATGAAGAGAAGAGTGGGGGAGAGGATGCAGGGGGGCCCACCCCCACCCCCACAGCTGCCA
CAGCATCTCACACCCCAGAGGCCTGGAGCAGAGGGAGATTGGCTGAACTTGATAGCAGACCTGCTCGGGT
CCCTGCCTCCCACTCTGGCCTCTGCCTTTCTCCCTCCTGCCTTCTGCTTGGGGAACTCAGGGCTTCACTC
CCAGAGCACCCCCTTAATCCCCACTTTTCAGGCCGTCTCAGTATTGCCTATGGGGGGTCACCCTCCTTCC
CCTACCCCAAGTGCCTTTGCTATGTTTTTATATCCTGGACTGGAGGTTTATTTTTAATATATATTATCTA
AGGAAAAAAAAAAAAAAAAAAAAAAAAAAA

Restriction Sites: RsrII-NotI

ACCN: NM_008488

Insert Size:	2763 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:	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:	BC012488, AAH12488
RefSeq Size:	3250 bp
RefSeq ORF:	2763 bp
Locus ID:	16801
UniProt ID:	Q61210
Cytogenetics:	7 A3
Gene Summary:	Seems to play a role in the regulation of RhoA GTPase by guanine nucleotide-binding alpha-12 (GNA12) and alpha-13 (GNA13) subunits. Acts as GTPase-activating protein (GAP) for GNA12 and GNA13, and as guanine nucleotide exchange factor (GEF) for RhoA GTPase. Activated G alpha 13/GNA13 stimulates the RhoGEF activity through interaction with the RGS-like domain. This GEF activity is inhibited by binding to activated GNA12. Mediates angiotensin-2-induced RhoA activation. Isoform 3 and isoform 4 do not homooligomerize and show an enhanced RhoGEF activity.[UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (5) lacks two alternate in-frame exons in the mid coding region, compared to variant 1. The resulting isoform (d) is shorter than isoform a.