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Product datasheet for MR230766

Abr (NM_001291186) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Abr (NM_001291186) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Abr
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR230766 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAAATCCTGCTCATCATTCGCTTCTGCTGTAACTGCACCTATGCTCTGCTGTACAAGCCAATTGACC
GAGTCACCCGGAGCACCCTGGTCCTTCACGATCTGTTGAAGCACACACCCGTGGACCACCCGGACTACCC
GCTGCTTCAGGATGCTCTCCGCATCTCCCAGAATTTCCTGTCTAGCATTAACGAGGACATTGATCCTCGC
CGGACTGCAGTCACAACCCCCAAGGGAGAGACTCGGCAGCTGGTGAAGGACGGCTTCCTGGTGGAAATGT
CTGAGAGCTCCCGGAAGCTGCGGCATGTCTTTCTCTTCACAGATGTTCTGCTGTGTGCCAAGCTAAAGAA
GACCTCAGCAGGAAAGCATCAGCAGTATGACTGTAAGTGGTACATCCCTCTGGCTGACTTAGTGTTCCCA
TCCCCTGAGGAGTCAGAGGCCAGTCCCCAGGTGCACCCCTTCCCAGACCACGAGCTCGAGGACATGAAAA
CGAAGATCTCTGCCCTCAAGAGTGAGATCCAGAAGGAGAAAGCCAACAAAGGACAGAGCCGAGCCATTGA
GCGCCTCAAAAAGAAGATGTTTGAGAATGAGTTCTTACTGCTGCTCAATTCCCCAACGATCCCTTTCCGG
ATACACAATCGGAATGGAAAGAGTTACCTGTTTCTTCTGTCTTCTGACTATGAGAGGTCGGAGTGGAGAG
AAGCGATTCAGAAGCTACAGAAGAAGGATCTCCAGGCCTTTGTCCTGAGCTCTGTGGAGCTCCAGGTGCT
CACGGGATCCTGTTTCAAGCTTAGGACTGTGCACAACATTCCTGTCACCAGCAATAAAGATGATGATGAG
TCTCCAGGACTGTACGGCTTCCTTCATGTCATCGTCCACTCTGCCAAGGGCTTTAAACAGTCAGCCAATC
TTTACTGTACTCTGGAGGTGGATTCCTTTGGCTATTTTGTCAGCAAAGCCAAGACCAGGGTGTTTCGGGA
CACGACAGAGCCCAAGTGGGATGAGGAGTTTGAGATTGAGCTGGAGGGTTCACAGTCCCTGAGGATCCTG
TGTTATGAGAAGTGCTACGACAAGACCAAGGTCAACAAAGACAACAATGAGATTGTGGACAAGATCATGG
GCAAGGGGCAGATCCAGCTGGATCCACAGACAGTAGAAAGCAAGAACTGGCATACGGACGTGATTGAAAT
GAATGGGATCAAAGTGGAATTCTCCATGAAATTTACCAGCCGTGACATGAGCCTGAAGAGGACCCCATCC
AAAAAGCAGACAGGCGTCTTTGGAGTGAAGATCAGCGTGGTGACCAAGCGGGAGCGCTCCAAGGTGCCCT
ACATCGTCCGGCAATGCATAGAAGAGGTGGAGAAGAGGGGCATTGAGGAGGTTGGCATCTACAGGATATC
AGGGGTGGCCACGGACATCCAGGCCCTGAAGGCTGTCTTTGATGCCAATAACAAGGACATCCTACTGATG
CTGAGCGACATGGACATCAACGCCATCGCTGGGACCCTCAAGCTATACTTTCGGGAGCTGCCTGAGCCCC
TCCTTACAGATAGACTTTATCCAGCCTTCATGGAGGGCATTGCCCTGTCAGACCCTGCTGCCAAGGAGAA
CTGCATGATGCACCTACTCCGCTCCCTGCCTGACCCCAACCTCATCACCTTCCTTTTCCTGCTGGAACAC
TTGAAAAGGGTTGCTGAGAAGGAGCCCATCAACAAGATGTCACTTCACAACCTTGCCACGGTGTTTGGCC
CCACGTTACTGAGACCATCAGAAGTGGAGAGCAAAGCACATCTCACATCAGCTGCAGACATCTGGTCCCA
TGATGTCATGGCCCAGGTCCAGGTCCTCCTCTACTACCTGCAGCATCCCCCCATTTCCTTCGCAGAACTG
AAGCGGAACACACTGTACTTCTCCACAGACGTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

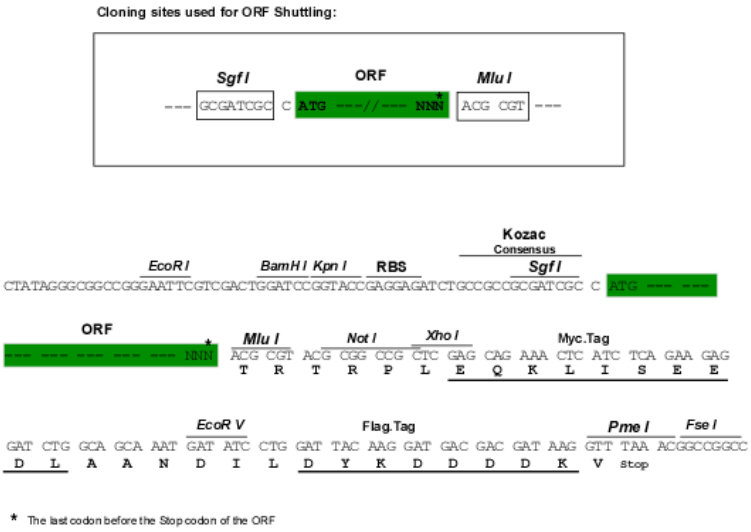
>MR230766 protein sequence
Red=Cloning site Green=Tags(s)

MEILLIIRFCCNCTYALLYKPIDRVTRSTLVLHDLLKHTPVDHPDYPLLQDALRISQNFLSSINEDIDPR
RTAVTTPKGETRQLVKDGFLVEMSESSRKLRHVFLFTDVLLCAKLKKTSAGKHQQYDCKWYIPLADLVFP
SPEESEASPQVHPFPDHELEDMKTKISALKSEIQKEKANKGQSRAIERLKKKMFENEFLLLLNSPTIPFR
IHNRNGKSYLFLLSSDYERSEWREAIQKLQKKDLQAFVLSSVELQVLTGSCFKLRTVHNIPVTSNKDDDE
SPGLYGFLHVIVHSAKGFKQSANLYCTLEVDSFGYFVSKAKTRVFRDTTEPKWDEEFEIELEGSQSLRIL
CYEKCYDKTKVNKDNNEIVDKIMGKGQIQLDPQTVESKNWHTDVIEMNGIKVEFSMKFTSRDMSLKRTPS
KKQTGVFGVKISVVTKRERSKVPYIVRQCIEEVEKRGIEEVGIYRISGVATDIQALKAVFDANNKDILLM
LSDMDINAIAGTLKLYFRELPEPLLTDRLYPAFMEGIALSDPAAKENCMMHLLRSLPDPNLITFLFLLEH
LKRVAEKEPINKMSLHNLATVFGPTLLRPSEVESKAHLTSAADIWSHDVMAQVQVLLYYLQHPPISFAEL
KRNTLYFSTDV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001291186

ORF Size: 1926 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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: NM_001291186.1, NP_001278115.1

RefSeq Size: 4463 bp

RefSeq ORF: 1926 bp

Locus ID: 109934

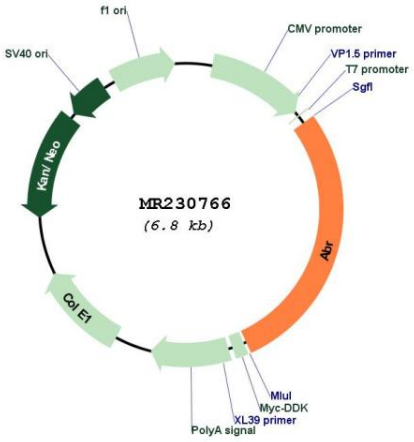
UniProt ID: Q5SSL4

Cytogenetics: 11 45.92 cM

MW: 73.5 kDa

Gene Summary: Protein with a unique structure having two opposing regulatory activities toward small GTP-binding proteins. The C-terminus is a GTPase-activating protein domain which stimulates GTP hydrolysis by RAC1, RAC2 and CDC42. Accelerates the intrinsic rate of GTP hydrolysis of RAC1 or CDC42, leading to down-regulation of the active GTP-bound form. The central Dbl homology (DH) domain functions as guanine nucleotide exchange factor (GEF) that modulates the GTPases CDC42, RHOA and RAC1. Promotes the conversion of CDC42, RHOA and RAC1 from the GDP-bound to the GTP-bound form (By similarity). Functions as an important negative regulator of neuronal RAC1 activity (PubMed:20962234). Regulates macrophage functions such as CSF-1 directed motility and phagocytosis through the modulation of RAC1 activity (PubMed:17116687).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR230766