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Product datasheet for MG217520

Abr (NM_198895) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Abr (NM_198895) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Abr
Synonyms:	6330400K15Rik; AU042359
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

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ORF Nucleotide Sequence:

>MG217520 representing NM_198895
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGCCGCTTAGCCACCGGGGCCTGCCGCGCCTCTCTTGGATCGACACCCTCTACAGCAACTTCAGCT
ACGGTGCGGAGGACTACGACGCAGAGGGGCATGAGGAGCAGAAGGGGCCCCCCGAGGGCTCGGAGACCAT
GCCGTACATCGACGAGTCACCCACCATGTCGCCCCAGCTCAGCGCCCGCAGCCAAGGTGGTGGGGACAGC
GTCTCGCCCACCCCACCTGAGGGATTGGCACCTGGGGTGGAGGCAGGGAAGGGTCTGGAGATGAGGAAGC
TAGTCCTCTCTGGGTTTCTGGCCAGTGAAGAGATCTACATTAACCAGCTGGAAGCTCTGTTACTGCCCAT
GAAACCCCTGAAGGCCACAGCCACCACCTCCCAGCCTGTGCTCACCATCCAACAGATTGAGACCATCTTC
TACAAGATCCAGGACATCTACGAGATCCACAAGGAGTTCTACGACAACCTCTGCCCCAAGGTGCAGCAGT
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TGTGGATAACTATAAAGTCGCTCTGGAGACAGCCGAGAAGTGCAGCCAGTCCAACAACCAGTTCCAGAAG
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ACCACGAGCTCGAGGACATGAAAACGAAGATCTCTGCCCTCAAGAGTGAGATCCAGAAGGAGAAAGCCAA
CAAAGGACAGAGCCGAGCCATTGAGCGCCTCAAAAAGAAGATGTTTGAGAATGAGTTCTTACTGCTGCTC
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ACCAGCAATAAAGATGATGATGAGTCTCCAGGACTGTACGGCTTCCTTCATGTCATCGTCCACTCTGCCA
AGGGCTTTAAACAGTCAGCCAATCTTTACTGTACTCTGGAGGTGGATTCCTTTGGCTATTTTGTCAGCAA
AGCCAAGACCAGGGTGTTTCGGGACACGACAGAGCCCAAGTGGGATGAGGAGTTTGAGATTGAGCTGGAG
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ATCAGCTGCAGACATCTGGTCCCATGATGTCATGGCCCAGGTCCAGGTCCTCCTCTACTACCTGCAGCAT
CCCCCCATTTCCTTCGCAGAACTGAAGCGGAACACACTGTACTTCTCCACAGACGTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

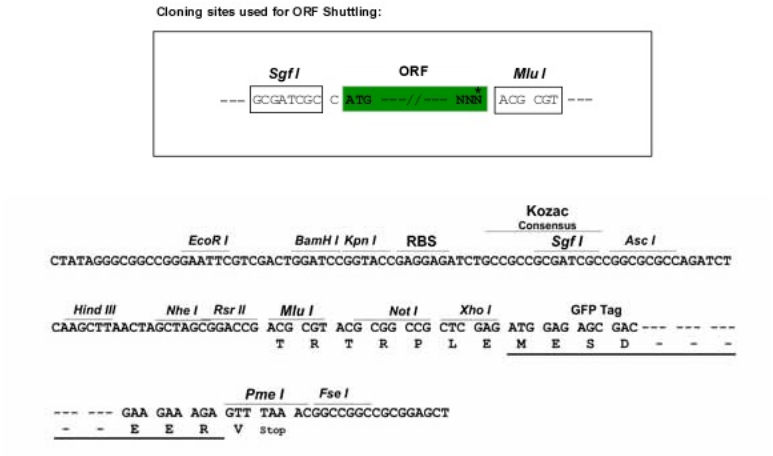
>MG217520 representing NM_198895
Red=Cloning site Green=Tags(s)

MEPLSHRGLPRLSWIDTLYSNFSYGAEDYDAEGHEEQKGPPEGSETMPYIDESPTMSPQLSARSQGGGDS
VSPTPPEGLAPGVEAGKGLEMRKLVLSGFLASEEIYINQLEALLLPMKPLKATATTSQPVLTIQQIETIF
YKIQDIYEIHKEFYDNLCPKVQQWDSQVTMGHLFQKLASQLGVYKAFVDNYKVALETAEKCSQSNNQFQK
ISEELKVKGPKDSKDSHTSVTMEALLYKPIDRVTRSTLVLHDLLKHTPVDHPDYPLLQDALRISQNFLSS
INEDIDPRRTAVTTPKGETRQLVKDGFLVEMSESSRKLRHVFLFTDVLLCAKLKKTSAGKHQQYDCKWYI
PLADLVFPSPEESEASPQVHPFPDHELEDMKTKISALKSEIQKEKANKGQSRAIERLKKKMFENEFLLLL
NSPTIPFRIHNRNGKSYLFLLSSDYERSEWREAIQKLQKKDLQAFVLSSVELQVLTGSCFKLRTVHNIPV
TSNKDDDESPGLYGFLHVIVHSAKGFKQSANLYCTLEVDSFGYFVSKAKTRVFRDTTEPKWDEEFEIELE
GSQSLRILCYEKCYDKTKVNKDNNEIVDKIMGKGQIQLDPQTVESKNWHTDVIEMNGIKVEFSMKFTSRD
MSLKRTPSKKQTGVFGVKISVVTKRERSKVPYIVRQCIEEVEKRGIEEVGIYRISGVATDIQALKAVFDA
NNKDILLMLSDMDINAIAGTLKLYFRELPEPLLTDRLYPAFMEGIALSDPAAKENCMMHLLRSLPDPNLI
TFLFLLEHLKRVAEKEPINKMSLHNLATVFGPTLLRPSEVESKAHLTSAADIWSHDVMAQVQVLLYYLQH
PPISFAELKRNTLYFSTDV

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN:	NM_198895
ORF Size:	2577 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_198895.2

RefSeq Size: 5260 bp

RefSeq ORF: 2580 bp

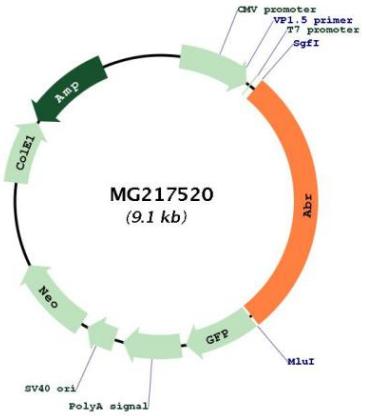
Locus ID: 109934

UniProt ID: Q5SSL4

Cytogenetics: 11 45.92 cM

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 MG217520