

Product datasheet for **RN201866**

Abr (NM_001105814) Rat Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Abr (NM_001105814) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Abr
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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Fully Sequenced ORF: >RN201866 representing NM_001105814
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGCCGCTTAGCCACCGGGCTGCCGCGCTCTCTTGGATCGACACCCTCTACAGCAACTTCAGT
 ACGGTGCAGAGGACTACGACGCAGAGGGCATGAGGAGCAGAAGGGGCCCGAGGGCTCGGAGACCAT
 GCCATACATCGACGAGTACCCACCATGTCGCCCCAGCTCAGCGCTCGCAGCCAGGGCGGTGGGAGAGC
 ATCTCACCCACCCACCTGAGGGTTGGCACCTGGGGTGGAGGCAGGGAAGGGCCTGGAGATGAGGAAGC
 TAGTTCTCTGGGTTTCTGGCCAGTGAAGAGATCTACATTAACCAGTTGGAAGCTCTGTTACTGCCAT
 GAAGCCCCTGAAGGCCACAGCCACCCTCCAGCCTGTGCTCACCATCCAGCAGATCGAGACCATCTTC
 TACAAGATCCAGGACATCTACGAGATCCACAAGGAGTTCTACGACAACCTCTGCCCAAGGTGCAGCAGT
 GGGACAGCCAGGTCAACATGGGCCATCTTTCCAGAACTGGCCAGTCAGCTTGGCGTGTACAAAGCATT
 TGTGGACAATAAAAGTCGCCCTGGAGACAGCTGAGAAGTGCAGCCAGTCCAACAACAGTTCCAGAAG
 ATCTCTGAGGAACTCAAAGTGAAAGGACCAAGGACTCTAAGGACAGCCACACATCAGTCAACATGGAA
 CTCTGCTGTATAAGCCTATTGACCGAGTCACTCGGAGTACCCTGGTCTGCACGATCTGTTGAAGCACAC
 ACCTGTGGACCACCCGACTACCCACTGCTTCAGGATGCCCTTCGAATCTCCAGAATTTTCTATCTAGC
 ATTAATGAGGATATTGATCCTCGCCGACTGCAGTCACAACCCCAAGGGGGAGACTCGGCAGCTGGTGA
 AGGACGGCTTCTGGTGGAAATGTCTGAGAGCTCCCGAAGCTGCGGCACGTCTTTCTTTCACAGATGT
 TCTACTGTGTCCAAGCTAAAGAAGACCTCTGCAGGAAAACATCAGCAGTATGACTGTAAGTGGTACATC
 CCCCTGGCTGACTTAGTGTCCCATCCCCTGAGGAGTCCGAGGCCAGTCCCAGGTACACCCCTTCCCAG
 ACCACGAGCTAGAGGACATGAAAGTGAAGATCTCTGCCCTCAAGAGTGAGATCCAGAAGGAGAAAGCCAA
 CAAAGGACAGAGCCGAGCCATTGAGCGCTCAAAAAGAAGATGTTTGAGAATGAGTTCTTACTGCTGCTC
 AATCCCCAACGATCCCATTCCGGATACACAATCGGAATGGAAAGAGTTACCTGTTTCTTGTCTTCTG
 ACTATGAGAGGTGCGAGTGGAGAGAAGCGATTACAGAACTACAGAAGAAGGATCTCCAGGCCTTTGTCT
 GAGCTCTGTGGAGCTCCAGGTGCTCACGGGATCCTGTTCAAGCTTAGGACTGTGCACAACATCTCTGTC
 ACCAGCAATAAGATGACGATGAGTCTCCAGGACTGTACGGCTTCTTTCATGTCATCGTCCACTCTGCCA
 AGGGCTTTAAACAATCAGCCAATCTTTACTGTACTCTGGAGGTGGATTCTTTGGCTATTTTGTGAGCAA
 AGCCAAAACCAGGGTGTTCGGGACACGACAGAGCCCAAGTGGGATGAGGAGTTTGAAGTTGAGCTGGAG
 GGCTCCCAGTCCCTGAGGATCCTGTGCTATGAGAAATGCTATGACAAGACCAAGGTCAACAAGGACAACA
 ATGAGATTGTGGACAAGATCATGGGCAAGGGGCAGATCCAGCTGGATCCACAGACAGTAGAAAGCAAGAA
 CTGGCATACGGATGTGATTGAAATGAATGGGATCAAAGTGGAAATTCCTCATGAAATTTACCAGCCGTGAC
 ATGAGCCTGAAGAGGACTCCATCCAAAAGCAGACAGGTGCTTTCGGAGTGAAGATCAGTGTGGTGACCA
 AGCGGGAGCGCTCCAAGGTGCCCTACATAGTCCGGCAGTGCATAGAAGAGGTGGAGAAGAGGGGCATCGA
 GGAGGTTGGCATCTACAGGATATCAGGGGTGGCCACGGACATCCAGGCCCTGAAGGCTGTCTTTGATGCC
 AATAACAAGGATATCCTACTGATGCTGAGTGACATGGACATCAACGCTATTGCTGGTACCCTCAAGCTCT
 ACTTTCCGGAGCTGCCTGAGCCCCTCCTTACAGACCGACTCTACCCAGCCTTTCATGGAGGGCATTGCCCT
 GTCAGATCCTGCTGCCAAGGAGAACTGCATGATGCACCTACTCCGTTCCCTGCCGACCCCAACCTCAC
 ACCTTCTTTTCTGCTGGAACACTTGAAGGGTTGCCGAGAAGGAGCCATCAACAAGATGTCACCTTC
 ACAACCTTGCCACAGTGTGGCCCCACGTTACTGAGACCCTCAGAAGTGGAGAGCAAAGCACATCTCAC
 ATCAGCTGCAGACATCTGGTCCCATGATGTCATGGCCAGGTCCAGGTCCTACTCTACTCTGCAGCAT
 CCCCCATTTCTTGCAGAACTGAAGCGGAACACTGTACTTCTCCACAGACGT**AG**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_001105814
Insert Size: 2580 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:	<ol style="list-style-type: none">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_001105814.2 , NP_001099284.1
RefSeq Size:	4964 bp
RefSeq ORF:	2580 bp
Locus ID:	287537
UniProt ID:	A0A0G2JTR4
Cytogenetics:	10q24
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 (By similarity). Regulates macrophage functions such as CSF-1 directed motility and phagocytosis through the modulation of RAC1 activity (By similarity).[UniProtKB/Swiss-Prot Function]