

Product datasheet for **MC220793**

Arhgef7 (NM_001113518) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Arhgef7 (NM_001113518) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Arhgef7
Synonyms:	betaPix; betaPix-b; betaPix-c; Cool; cool-1; mKIAA0142; p85Cool1; p85SPR; Pak3bp; PIX
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >MC220793 representing NM_001113518
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGACTGATAACACCAACAGCCAACTGGTAGTACGAGCCAAGTTAACTCCAGCAGACCAATGAAGATG
 AACTCTCCTTCTCAAAGGGTGATGTCATCCATGTCACACGAGTGGAGGAAGGAGGCTGGTGGGAGGGCAC
 ACACAATGGCAGGACCGGCTGGTCCCCAGCAACTACGTTTCGAGAGATCAAGCCAAGTGAGAAGCCCGTG
 TCACCCAAATCAGGGACCTTGAAGAGCCCTCCCAAAGGGTTCGATACGACTGCCATCAACAAGAGCTATT
 ACAACGTGGTGCTACAGAACATCCTGAAACAGAGCATGAGTATTCGAAGGAGCTGCAGTCTGTGCTGTC
 CACCTACCTGCGGCCACTGCAGACCAGTACAAGTTGAGTTCAGCAAACACTTCATATTTAATGGGAAAT
 CTAGAGGAAATATCTTCCTCCAGCAAGTGCTGTACAGTCCCTAGAAGAATGCACGAAGTCTCCTGAAG
 CCCAACAGAGAGTTGGTGGCTGCTTCTGAGCCTGATGCCGAGATGAGGACCCTGTACCTCGCTTACTG
 TGCCAACCACCCATCTGCTGTGAGCGTCTCACAGAGCACAGTGAGGACCTAGGAGAGTTTCATGAAACA
 AAAGGTGCCAGCAGCCCTGGGATCCTGGTGTGACCACCGGCCTGAGCAAGCCCTTCATGCGCCTGGACA
 AGTACCCACACTGCTAAAGGAGCTGGAGAGACACATGGAGGATTATCATCCTGATAGACAAGATATTCA
 GAAGTCTATGACGGCCTTCAAAAACCTTTCAGCTCAGTGTCAAGAAGTTCGCAAGAGGAAGGAGCTGGAG
 CTGCAGATCCTGACGGAGCCATCAGGAGCTGGGAGGGGGATGACATAAAGACCTTGGCAGTGTACAT
 ACATGTCCAAGTCAACATTCAGTGTGCGGGAAGCAGGAGAAGAATGAGAGATACCTCCTGCTCTTCCC
 AAACCTTCTGCTCATGTTGTCTGCAAGTCCCAGGATGAGTGGTTTCATCTATCAGGGGAAGCTGCCAACA
 ACAGGAATGACAATCACAAAGCTTGAGGACAGTAAAACCATAGGAATGCATTTGAGATATCAGGGAGCA
 TGATCGAGCGGATTCTGGTCTCCTGCACCAGCCAGGACTTACACGAGTGGGTGGAACACCTGCAGAA
 GCAGACGAAGGTCACATCTGTGAGCAACCCACCATCAAACCCCACTCGGTGCCATCACACACACTTCCT
 TCCCATCTCTCACTCCATCCAGCAAACACGCGGACAGCAAGCCCGTGGCACTGACGCCTGCGTACCACA
 CACTCCCCACCCCTCTCACCATGGCACCCACACACCACATCAGCTGGGGACCCTGGAGCCTCCGAA
 GACCCCAAGCCTTGGAGCCTGAGTTGCCTGCGGCCTGCACCTCCCCTCCGGCCCTCAGTGTCTCTGC
 TACAAGGAGGATCTCAGTAAGAGCCCAAGACCATGAAAAGCTGCTGCCGAAGCGCAAGCCCGAGCGGA
 AGCCTTCGGACGAGGAGTTCGCTGTGCGCAAGAGCACAGCGGCGCTGGAAGAAGACGCTCAGATCCTGAA
 GGTATCGAAGCTTATTGCACAAGTCAAAGACGCGCCAGACCCTGAACTCAACATGGCAAGGCACTGAC
 CTGATGCATAATCACGTCTTGGCTGATGACGACCAATCAAGTCTAGACTCCTTGGGTGCTGCGAGTAGCC
 TTTCTCGTTTGGAGCCCTCAGACCTCTCGAAGACTCTGAGTATGACAGTATATGGACAGCCCATAGTTA
 CAGAATGGGTTCTGCATCCCGTTACGCAAGAATCTGCTCCACAAGTGTGCTTCCAGAAGAAGAAAAA
 ATTATAGTCAAGAAACCAAGAGCAATGGGCAGACAGTATAGAGGAAAAGAGCCTCGTGGATACGGTGT
 ATGCGTTAAAGGATGAAGTCCAGGAGTTAAGACAGGATAACAAGAAGATGAAGAAGTCTTAGAGGAGGA
 ACAGAGGGCCCGCAAGGACTTAGAGAAGCTGGTGGGAAGGTTCTAAAGAATATGAACGACCCTGCCTGG
 GATGAGACCAATCTA**TAG**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_001113518

Insert Size: 2118 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:	<u>NM_001113518.1, NP_001106990.1</u>
RefSeq Size:	4665 bp
RefSeq ORF:	2118 bp
Locus ID:	54126
UniProt ID:	<u>Q9ES28</u>
Cytogenetics:	8 A1.1
Gene Summary:	Acts as a RAC1 guanine nucleotide exchange factor (GEF) and can induce membrane ruffling. May function as a positive regulator of apoptosis. Functions in cell migration, attachment and cell spreading. Promotes targeting of RAC1 to focal adhesions. Downstream of NMDA receptors and CaMKK-CaMK1 signaling cascade, promotes the formation of spines and synapses in hippocampal neurons (By similarity).[UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (2) differs in the 5' UTR and contains multiple coding differences including translation initiation at a downstream start codon, compared to variant 1. The resulting isoform (b) is shorter than isoform a.