

Product datasheet for **RC208074**

ARHGEF6 (NM_004840) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ARHGEF6 (NM_004840) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ARHGEF6
Synonyms:	alpha-PIX; alphaPIX; Cool-2; COOL2; MRX46; PIXA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC208074 representing NM_004840
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAATCCAGAAGAACAATCGTGACATGGCTTATATCTTTGGGAGTTTTAGAGTCCCCTAAAAAGACCA
 TCTGTGATCCGGAGGAGTTTTAAAGTCCTCGCTGAAAAATGGGTAGTTCTGTGCAAACCTGATCAACAG
 ACTCATGCCTGGCTCTGTGAAAAAGTTTTGTCTGGATCCCCAACTGAAGCTGACTGCATCAACAACATC
 AATGACTTCTGAAAGGATGTGCAACCCTCCAAGTGAAATATTTGATCCTGATGACCTTTATTCAGGGG
 TCAATTTCTCAAGGTAAGTACTCTTTAGCTGTCAACAAAGCAACAGAAGATCAGCTATCAGAAAG
 ACCATGTGGACGTTCTCTTCTCTTAGTGTCTAATACTTCTCAGACAAACCCACAGGGAGCAGTTTCT
 AGCACAGTTTCAGGGCTGCAAAGGCAGTCAAAGACAGTGGAGATGACGGAAAATGGAAGTCATCAGTTGA
 TAGTAAAAGCAAGATTCAACTTTAAGCAGACTAATGAGGATGAACTGTCAGTTTGAAGGGGACATCAT
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 AGTAATTATGTCGGTGAATTAATCCAGTGAGAGACCTCTCTCCCAAAAGCCGTCAAAGGATTTGAAA
 CTGCTCCACTTACCAAGAATTATTATACTGTGGTGTACAGAATCCTGGACACTGAAAAAGAATATGC
 TAAAGAACTTCAGTCTCTTCTTGTACTTACTTAAAGCCCTGCAGTCCAATAACAATCTGAGTACTGTG
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 GAGTTGGAACAATTCATGAAAAATCAAGGTGCATCGAGCCAGGTATCCTCATTTAACAACAAACCTCA
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 CTGAGGAAGAGAAAACAGCTGGAGTTACAGATACTGTCCGAACCTATTCAGGCATGGGAAGGAGAAGATA
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 GGAGCGGTACCTTATGTTATTTTCAAATGTCTGATAATGTTATCTGCAAGTCTCGGATGAGTGGCTTT
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 GCACATTTGAAATCACTGGTAACACAGTGGAGAGAATTGTGGTCCATTGTAACAACAACCCAGGACTTCCA
 GGAATGGTTGGAGCAGCTGAACAGACTGATCAGAGGACCTGCCTCTTGCAGTTCATTATCCAAAACCTCA
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 AAATTATAAAAACCGTGGAGTTTAAAGTTGTCTACGACCTGCACCTCACTTAGACCATCAGCAGCACTAGG
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 CATAAAGGAAGACTGAGAGAAAACCATCGGAGGAGGAATATGTGATTAGGAAAAGTACAGCTGCTCTGG
 AAGAGGATGCTCAAAATCCTTAAAGTGTGCAAGCCTACTGCACCAGCGCAATTTTCAACAAGGCCATGG
 CTCAAGTACTCGAAAAGATTCCATTCCACAAGTCTACTCCCTGAGGAAGAGAACTCATCATTGAAGAA
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 AGGTGAGAGAACTGAAGCAGGAAAATAAAGAATGAAGCAATGCCTGGAAGAAGAACTGAAATCAAGAAG
 GGACCTAGAAAAGCTGGTGGGAGGCTTTGAAGCAAACAGATGAGTGTATTCGAGGCGAGTCCAGTAGC
 AAGACCTCAATTCTTCCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC208074 representing NM_004840
Red=Cloning site Green=Tags(s)

MNPEEQIVTWLISLGVLESPKKTICDPEEFLKSSLKNGVVLCKLINRLMPGSVEKFCCLDPQTEADCINNI
NDFLKGCATLQVEIFDPDDL YSGVNF SKVLSTLLAVNKATEDQLSERPCGRSSSL SAANTSQTNPQGAVS
STVSGLQRQSKTVEMTENGSHQLIVKARFNFKQTNEDELSVCKGDIIYVTRVEEGGWEGTLNGRTGWFP
SNYVREIKSSERPLSPKAVKGFETAPLTKNYT VVLQNILDTEKEYAKELQSLLVTYLRPLQSNNNLSTV
EVTSL LGNFEEVCTFQQTLCQALEECSKFPENQHKVGGCLLSLMPHFKSMYLAYCANHPSAVNVLTQHS
ELEQFMENQGASSPGILILTNNLSKPFMRLEKYVTLLQELERHMEDTHPDH QDILKAIIVAFKTLMGQCQD
LRKRKQLELQILSEPIQAWEGEDIKNLGNVIFMSQVMVQYGACEEKEERYLMLFSNVLIMLSASPRMSGF
IYQGKIPIAGTVVTRLDEIEGNDCTFEITGNTVERIVVHCNNNQDFQEWLEQLNRLIRGPASCSSLSKTS
SSSCSAHSSF SSTGQPRGPLEPPQIIKPWSLSCLRPAPPLRPSAALGYKERMSYILKESSKSPKTMKKFL
HKRKTERKPS EEEYVIRKSTAAL EEDAQILKVI EAYCTS ANFQQGHGSSTRKDSIPQVLLPEEKL IIEE
TRSNQGTIMEEKS LVDTVYALKDEVRELKQENKRMKQCLEEELKSRRDLEKLVRRLLKQTDECIRGESS
KTSILP

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8113_e10.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:


ACCN: NM_004840

ORF Size: 2328 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_004840.3](#)

RefSeq Size: 5282 bp

RefSeq ORF: 2331 bp

Locus ID: 9459

UniProt ID: [Q15052](#)

Cytogenetics: Xq26.3

Domains: RhoGEF, SH3, CH, PH

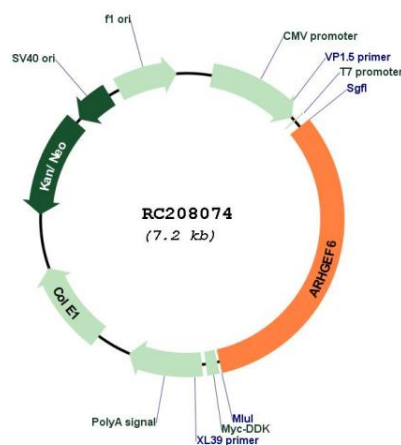
Protein Families: Druggable Genome

Protein Pathways: Pancreatic cancer, Regulation of actin cytoskeleton

MW: 87.3 kDa

Gene Summary: Rho GTPases play a fundamental role in numerous cellular processes that are initiated by extracellular stimuli that work through G protein coupled receptors. The encoded protein belongs to a family of cytoplasmic proteins that activate the Ras-like family of Rho proteins by exchanging bound GDP for GTP. It may form a complex with G proteins and stimulate Rho-dependent signals. This protein is activated by PI3-kinase. Mutations in this gene can cause X-chromosomal non-specific cognitive disability. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC208074