

Product datasheet for **RC200737**

A RAF (ARAF) (NM_001654) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	A RAF (ARAF) (NM_001654) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	A RAF
Synonyms:	A-RAF; ARAF1; PKS2; RAFA1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC200737 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGGATCGCC

ATGGAGCCACCACGGGGCCCCCTGCCAATGGGGCCGAGCCATCCCGGGCAGTGGGCACCGTCAAAGTAT
 ACCTGCCCAACAAGCAACGCACGGTGGTACTGTCCGGGATGGCATGAGTGTCTACGACTCTCTAGACAA
 GGCCCTGAAGGTGCGGGGTCTAAATCAGGACTGCTGTGGTCTACCGACTCATCAAGGGACGAAAGACG
 GTCACTGCCTGGGACACAGCCATTGCTCCCTGGATGGCGAGGAGCTCATTGTCGAGGTCCTTGAAGATG
 TCCCGCTGACCATGCACAATTTGTACGGAAGACCTTCTCAGCCTGGCGTTCTGTGACTTCTGCCTTAA
 GTTTCTGTTCCATGGCTTCCGTTGCCAAACCTGTGGCTACAAGTCCACCAGCATTGTTCTCCAAGGTC
 CCCACAGTCTGTGTTGACATGAGTACCAACCGCCAACAGTTCTACCACAGTGTCCAGGATTTGTCGGAG
 GCTCCAGACAGCATGAGGCTCCCTCGAACCGCCCTGAATGAGTTGCTAACCCCCAGGGTCCCAGCCC
 CCGCACCCAGCACTGTGACCCGGAGCACTTCCCTTCCCTGCCAGCCAATGCCCCCTACAGCGCATC
 CGCTCCACGTCCACTCCCAACGTCCATATGGTCAGCACCACGGCCCCATGGACTCCAACCTCATCCAGC
 TCACTGGCCAGAGTTTACGACTGATGCTGCCGTAAGTAGAGGAGGTAGTGATGGAACCCCCGGGGGAG
 CCCCAGCCAGCCAGCGTGTCTCGGGGAGGAAGTCCCCACATTCAAAGTACCAGCAGAGCAGCGCGAG
 CGGAAGTCTTGGCCGATGACAAGAAGAAAGTGAAGAACCTGGGGTACCGGGACTCAGGCTATTACTGGG
 AGGTACCACCCAGTGAGGTGCAGCTGCTGAAGAGGATCGGGACGGGCTCGTTTGGCACCGTGTTCGAGG
 GCGGTGGCATGGCGATGTGGCCGTGAAGGTGCTCAAGGTGTCAGCCACAGCTGAGCAGGCCCAGGCT
 TTCAAGAATGAGATGCAGGTGCTCAGGAAGACGCGACATGTCAACATCTGCTGTTTATGGGCTTCATGA
 CCGGCGGGGATTTGCCATCATCACAGTGGTGTGAGGGCTCCAGCCTTACCACATCACATGTGGC
 CGACACACGCTTCGACATGGTCCAGCTCATCGAGTGGCCGGCAGACTGCCAGGGCATGGACTACCTC
 CATGCCAAGAACATCATCCACCGAGATCTCAAGTCTAACAAACATCTTCTACATGAGGGGCTCACGGTGA
 AGATCGGTGACTTTGGCTTGGCCACAGTGAAGACTCGATGGAGCGGGGCCAGCCCTTGGAGCAGCCCTC
 AGGATCTGTGCTGTGGATGGCAGCTGAGGTGATCCGTATGCAGGACCCGAACCCCTACAGCTTCCAGTCA
 GACGTCTATGCCTACGGGTTGTGCTCTACGAGCTTATGACTGGCTCACTGCCTTACAGCCACATTTGGCT
 GCCGTGACCAGATTATCTTTATGGTGGCCGTGGCTATCTGTCCCGGACCTCAGCAAAATCTCCAGCAA
 CTGCCCAAGGCCATGCGGCGCCTGCTGTCTGACTGCCTCAAGTCCAGCGGGAGGAGCGGCCCTCTTC
 CCCAGATCTGGCCACAATTGAGCTGCTGCAACGGTCACTCCCCAAGATTGAGCGGAGTGCTCGGAAC
 CCTCTTGACCCGACCCAGGCCGATGAGTTGCCTGCCTGCTACTCAGCGCAGCCCGCCTTGTGCCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC200737 protein sequence
 Red=Cloning site Green=Tags(s)

MEPPRPPANGAEPsRAVGTVKVYLPNKQRVTVTRDGMsVYDSLKALKVRGLNQDCCVVYRLIKGRKT
 VTAWDTAIAPLDGEELIVEVLEDVPLTMHNFVRKTFVSLAFCDCLKFLFHGFRQCQCYKFKHQCSSKV
 PTVCVDMSTNRQQFYHSVQDLGGSRQHEAPSNRPLNELLTPQGSPRTQHCDPEHFPPAPANAPLQRI
 RSTSTPNVHMVSTTAPMDSNLIQLTGQSFSTDAAGSRGGSDGTPRGSPSPASVSSGRKSPHSKSPAEQRE
 RKSLADDKKKVKNLGYRDSGYWVPPSEVQLLKRIGTGSFGTVFRGRWHGDVAVKVLKVSQPTAEQAQA
 FKNEMQVLRKTRHVNILLFMGMTRPGFAIITQWCEGSSLYHHLHVADTRFDMVQLIDVARQTAQGM DYL
 HAKNI IHRDLKSNNI FLHEGLTVKIGDFGLATVKTRWSGAQPLEQPSGSLVWMAAEVIRMQDPNPYSFQS
 DYYAYGVVLYELMTGSLPYSHIGCRDQIIFMVGRGYLSPDL SKISSNCPKAMRRLLS DCLKFQREERPLF
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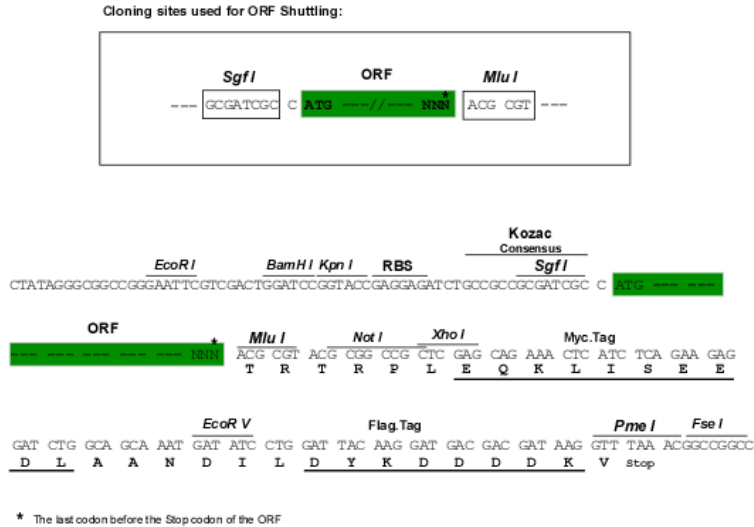
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6149_h08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001654

ORF Size: 1818 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001654.5](#)

RefSeq Size: 2562 bp

RefSeq ORF: 1821 bp

Locus ID: 369

UniProt ID: [P10398](#)

Cytogenetics: Xp11.3

Domains: pkinase, TyrKc, DAG_PE-bind, S_TKc, RBD

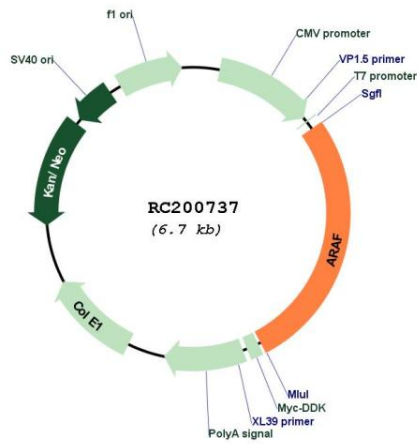
Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: Acute myeloid leukemia, Bladder cancer, Chronic myeloid leukemia, Colorectal cancer, Endometrial cancer, ErbB signaling pathway, Glioma, Insulin signaling pathway, Long-term depression, Long-term potentiation, Melanoma, Natural killer cell mediated cytotoxicity, Non-small cell lung cancer, Pancreatic cancer, Pathways in cancer, Progesterone-mediated oocyte maturation, Prostate cancer, Regulation of actin cytoskeleton, Renal cell carcinoma, Vascular smooth muscle contraction

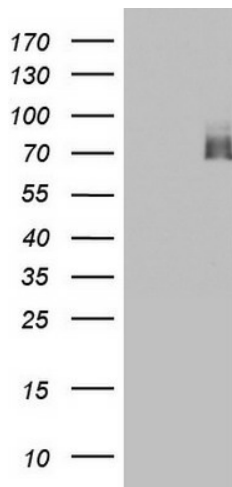
MW: 67.6 kDa

Gene Summary: This proto-oncogene belongs to the RAF subfamily of the Ser/Thr protein kinase family, and maybe involved in cell growth and development. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Jan 2012]

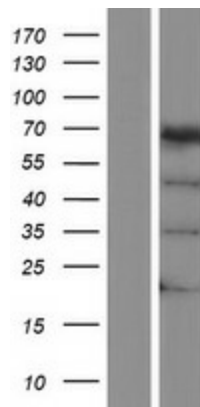
Product images:



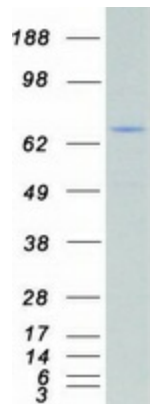
Circular map for RC200737



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ARAF (Cat# RC200737, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ARAF (Cat# [TA803663]). Positive lysates [LY400623] (100ug) and [LC400623] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400623]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200737 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ARAF protein (Cat# [TP300737]). The protein was produced from HEK293T cells transfected with ARAF cDNA clone (Cat# RC200737) using MegaTran 2.0 (Cat# [TT210002]).