

Product datasheet for **RC223974**

alpha 1b Adrenergic Receptor (ADRA1B) (NM_000679) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	alpha 1b Adrenergic Receptor (ADRA1B) (NM_000679) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	alpha 1b Adrenergic Receptor
Synonyms:	ADRA1; ALPHA1BAR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC223974 representing NM_000679
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAATCCCGACCTGGACACCGGCCACAACACATCAGCACCTGCCACTGGGGAGAGTTGAAAAATGCCA
 ACTTCACTGGCCCAACCAAGACCTCGAGCAACTCCACACTGCCAGCTGGACATCACCAGGGCCATCTC
 TGTGGGCTGGTCTGGGCGCCTTCATCCTCTTTGCCATCGTGGGCAACATCCTAGTCATCTTGTCTGTG
 GCCTGCAACCGGCACCTGCGGACGCCACCAACTACTTATTGTCAACCTGGCCATGGCCGACCTGCTGT
 TGAGTTCACCGTCTGCCCTTCTCAGCGGCCCTAGAGGTGCTCGGCTACTGGGTGCTGGGGCGGATCTT
 CTGTGACATCTGGGACCGTGGATGTCTGTGCTGCACAGCTCCATTCTGAGCCTGTGCGCCATCTCC
 ATCGATCGCTACATCGGGGTGCGCTACTCTGTCAGTATCCCACGCTGGTACCCGGAGGAAGGCCATCT
 TGGCGTCTCAGTGTCTGGGTCTTGTCCACCGTCATCTCCATCGGGCTCTCCTTGGGTGGAAGGAGCC
 GGCACCAACGATGACAAGGAGTGGGGTCCCGAAGAACCCTTCTATGCCCTTCTCCTCTCTGGGC
 TCCTTCTACATCCCTCTGGCGGTATTCTAGTCATGACTGCCGTGTCTATATAGTGCCAAGAGAACCA
 CCAAGAACCTAGAGGCAGGAGTCATGAAGGAGATGTCCAACCTCAAGGAGCTGACCTGAGGATCCATTC
 CAAGAACCTTACGAGGACACCTTAGCAGTACCAAGGCCAAGGGCCACAACCCAGGAGTTCATAGCT
 GTCAAACCTTTTAAAGTTCTCCAGGGAAAAGAAAGCAGTAAGACGTTGGGCATTGTGGTCGGTATGTTCA
 TCTTGTCTGGCTACCCTTCTTCATCGCTCTACCGCTTGGCTCCTTGTCTCCACCCTGAAGCCCCCGA
 CGCCGTGTTCAAGGTGGTGTCTGGCTGGGCTACTTCAACAGCTGCCTCAACCCATCATCTACCCATGC
 TCCAGCAAGGAGTTCAAGCGCGCTTTCGTGCGCATCCTCGGTGCCAGTGCCGCGCCGCGCCGCGCC
 GACGCCGCGCCGCGCTGCGCTGGGCGGCTGCGCTACACCTACCGCCGTGGACGCGCGCGGCTCGCT
 GGAGCGCTCGCAGTCGCGCAAGGACTCGCTGGACGACAGCGGCAGCTGCCTGAGCGGCAGCCAGCGGACC
 TTGCCCTCGCCCTCGCCGAGCCCGGCTACCTGGGCGCGGCGGCCACCGCCAGTCGAGCTGTGCGCT
 TCCCGAGTGGAAGGCGCCCGGCGCCCTCTGAGCCTGCCCGCGCTGAGCCCCCGGCCGCGCGGCCG
 CCACGACTCGGGCCGCTCTTACCTTCAAGCTCCTGACCGAGCCGAGAGCCCCGGACCGACGCGCGC
 GCCAGCAACGGAGGCTGCGAGGCCGCGCGGACGTGGCCAACGGGAGCCGGGCTTCAAAGCAACATGC
 CCCTGGCGCCCGGCGAGTTT

ACGCGTACGCGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC223974 representing NM_000679
 Red=Cloning site Green=Tags(s)

MNPDLDTGHNTSAPAHWGELKNaNFTGPNQTSSNSTLPQLDITRAISVGLVLGAFILFAIVGNILVILSV
 ACNRHLRPTNYFIVNLAMADLLLSTVLPFSAALEVLGYWVLRIFCDIWAADVLCCTASILSLCAIS
 IDRYIGVRYSLQYPTLVTRRKAILALLSVWLSTVISIGPLLGWKEPAPNDKCEGVTEEPFYALFSSLG
 SFYIPLAVILVMYCRVYIVAKRTTKNLEAGVMKEMSNSKELTLRIHKNFHEDTSSKAKGHNPRSSIA
 VKLKFVSREKKAAKTLGIVVGMFILCWLPPFIALPLGSLFSTLKPDAVFKVFWLGYFNSCLNPIIYPC
 SSKEFKRAFVRILGCQCRGRRRRRRRRRLGGCAYYRPWTRGGSLERSQSRKDSLDDSGSCLSGSQRT
 LPSASPSPGYLGRGAPPVELCAFPEWKAPGALLSLPAPEPPGRRGRHDSGPLFTFKLLTEPESPGTDGG
 ASNGGCEAAADVANGQPFGKSNMPLAPGQF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6824_e03.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_000679

ORF Size: 1560 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_000679.4](#)

RefSeq Size: 2272 bp

RefSeq ORF: 1563 bp

Locus ID: 147

UniProt ID: [P35368](#)

Cytogenetics: 5q33.3

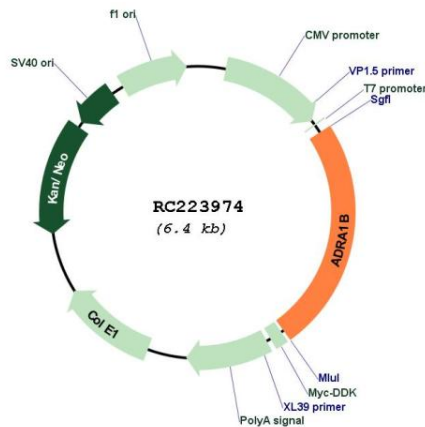
Protein Families: Druggable Genome, GPCR, Transmembrane

Protein Pathways: Calcium signaling pathway, Neuroactive ligand-receptor interaction, Vascular smooth muscle contraction

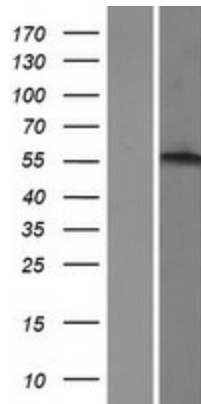
MW: 56.7 kDa

Gene Summary: Alpha-1-adrenergic receptors (alpha-1-ARs) are members of the G protein-coupled receptor superfamily. They activate mitogenic responses and regulate growth and proliferation of many cells. There are 3 alpha-1-AR subtypes: alpha-1A, -1B and -1D, all of which signal through the Gq/11 family of G-proteins and different subtypes show different patterns of activation. This gene encodes alpha-1B-adrenergic receptor, which induces neoplastic transformation when transfected into NIH 3T3 fibroblasts and other cell lines. Thus, this normal cellular gene is identified as a protooncogene. This gene comprises 2 exons and a single large intron of at least 20 kb that interrupts the coding region. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC223974



Western blot validation of overexpression lysate (Cat# [LY424570]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223974 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).