

Product datasheet for RC226550

Retinoic Acid Receptor alpha (RARA) (NM_001145302) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Retinoic Acid Receptor alpha (RARA) (NM_001145302) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Retinoic Acid Receptor alpha
Synonyms:	NR1B1; RAR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC226550 representing NM_001145302 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCAGCAACAGCAGCTCCTGCCGACACCTGGGGCGGGCACCTCAATGGGTACCCGGTGCCTCCCT
ACGCCCTTCTTCCCCCTATGCTGGGTGGACTCTCCCCGCCAGGCGCTCTGACCCTCTCCAGCACCA
GCTTCCAGTTAGTGGATATAGCACACCATCCCCAGCCACTGTGAGAAACGACCGAAACAAGAAGAAG
GAGGTGCCAAGCCGAGTGCTCTGAGAGCTACACGCTGACGCCGAGGTGGGGGAGCTCATTGAGAAGG
TGCCAAAGCGCACCAGGAACTTCCCTGCCCTCTGCCAGCTGGGCAAATACACTACGAACAACAGCTC
AGAACAACGTGTCTCTCTGGACATTGACCTCTGGGACAAGTTCACTGAACTCTCCACCAAGTGCATCATT
AAGACTGTGGAGTTCGCCAAGCAGCTGCCCGGCTTCAACCCCTCACCATCGCCGACCAGATCACCTCC
TCAAGGCTGCCTGCCTGGACATCCTGATCCTGCGGATCTGCACGCGGTACACGCCGAGCAGGACACCAT
GACCTTCTCGGACGGGCTGACCTGAACCGGACCAGATGCACAACGCTGGCTTCGGCCCCCTCACCGAC
CTGGTCTTTGCCCTCGCCAACAGCTGCTGCCCTGGAGATGGATGATGCGGAGACGGGGTCTCAGCG
CCATCTGCCTCATCTGCGGAGACCGCCAGGACCTGGAGCAGCCGACCGGTTGGACATGCTGCAGGAGCC
GCTGCTGGAGGCGCTAAAGGTCTACGTGCGGAAGCGGAGGCCAGCCGCCCCACATGTTCCCAAGATG
CTAATGAAGATTACTGACCTGCGAAGCATCAGCGCCAAGGGGGCTGAGCGGGTATCAGCTGAAGATGG
AGATCCCGGCTCCATGCCGCTCTCATCCAGGAAATGTTGAGAACTCAGAGGGCTGGACACTCTGAG
CGGACAGCCGGGGTGGGGGGCGGACGGGGTGGCCTGGCCCCCGCCAGGCAGCTGTAGCCCCAGC
CTCAGCCCCAGCTCCAACAGAAGCAGCCCGCCACCCACTCCCCG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTAA



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Protein Sequence: >RC226550 representing NM_001145302
 Red=Cloning site Green=Tags(s)

MASNSSSCTPGGGHLNGYPVPPYAFFFPMLGGLSPPGALTTLQHQLPVSGYSTPSPATVRNDRNKKKK
 EVPKPECSYTLTPEVGELIEKVRKAHQETFPALCQLGKYTTNNSSEQRVSLDIDLWDFSELSTKCI
 KTVEFAKQLPGFTTLTIADQITLLKAACLDILILRICTRYTPEQDTMTFSDGLTLNRTQMHNAGFGPLTD
 LVFAFANQLPLEMDDAETGLLSAICLICGDRQDLEQPDRVMDLQEPLLEALKVYVRKRRPSRPHMFPKM
 LMKITDLRSISAKGAERVITLKMEIPGSMPLIQEMLENSEGLDTLSGQPGGGGRDGGGLAPPGSCSPS
 LSPSSNRSSPATHSP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8055_a08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001145302

ORF Size: 1095 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_001145302.3](#)

RefSeq ORF: 1098 bp

Locus ID: 5914

UniProt ID: [P10276](#)

Cytogenetics: 17q21.2

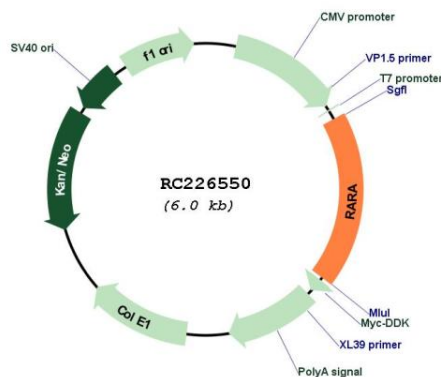
Protein Families: Druggable Genome, Nuclear Hormone Receptor, Transcription Factors

Protein Pathways: Acute myeloid leukemia, Pathways in cancer

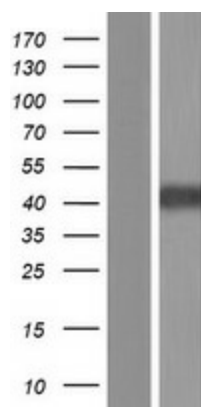
MW: 39.5 kDa

Gene Summary: This gene represents a nuclear retinoic acid receptor. The encoded protein, retinoic acid receptor alpha, regulates transcription in a ligand-dependent manner. This gene has been implicated in regulation of development, differentiation, apoptosis, granulopoiesis, and transcription of clock genes. Translocations between this locus and several other loci have been associated with acute promyelocytic leukemia. Alternatively spliced transcript variants have been found for this locus.[provided by RefSeq, Sep 2010]

Product images:



Circular map for RC226550



Western blot validation of overexpression lysate (Cat# [LY428805]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC226550 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).