

Product datasheet for **RC209208**

Retinoic Acid Receptor beta (RARβ) (NM_016152) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Retinoic Acid Receptor beta (RARβ) (NM_016152) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Retinoic Acid Receptor beta
Synonyms:	HAP; MCOPS12; NR1B2; RARbeta1; RRB2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC209208 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTTTGACTGTATGGATGTTCTGTCTGAGTCTGGGCAAATCCTGGATTTCTACACTGCGAGTCCGT
 CTTCTGCATGCTCCAGGAGAAAGCTCTCAAAGCATGCTTCAGTGGATTGACCCAAACCGAATGGCAGCA
 TCGGCACACTGCTCAATCAATTGAAACACAGACCAGCTCTGAGGAACTCGTCCCAAGCCCCCATCT
 CCACTTCTCCCCCTCGAGTGTACAAACCTGCTTCGTCTGCCAGGACAAATCATCAGGGTACCACTATG
 GGGTCAGCGCCTGTGAGGGATGTAAGGGCTTTTTCCGAGAAGTATTCAGAAGAATATGATTTACACTTG
 TCACCGAGATAAGAAGTGTATTATAAAAGTACCAGGAATCGATGCCAATACTGTGACTCCAGAAG
 TGCTTTGAAGTGGGAATGTCAAAGAATCTGTGAGGAATGACAGGAACAAGAAAAAGAAGGAGACTTCGA
 AGCAAGAATGCACAGAGAGCTATGAAATGACAGCTGAGTTGGACGATCTCACAGAGAAGATCCGAAAAGC
 TCACCAGGAAACTTTCCCTTCACTCTGCCAGCTGGGTAATACACCACGAATTCAGTGTGACCATCGA
 GTCGACTGGACCTGGGCTCTGGGACAAATTCAGTGAAGTGGCCACCAAGTGCATTATTAAGATCGTGG
 AGTTTGCTAAACGTCTGCCTGGTTTCACTGGCTTGACCATCGCAGACCAATTACCTGTGAAGGCCGC
 CTGCCTGGACATCCTGATTCTTAGAATTTGCACCAGGTATACCCAGAACAAGACACCATGACTTTCTCA
 GACGGCCTTACCCTAAATCGAACTCAGATGCACAATGCTGGATTTGGTCTCTGACTGACCTTGTGTTCA
 CCTTTGCCAACAGCTCCTGCCTTTGGAATGGATGACACAGAAACAGGCCTTCTCAGTGCCATCTGCTT
 AATCTGTGGAGACCGCCAGGACCTTGAGGAACCGACAAAAGTAGATAAGCTACAAGAACCATTGCTGGAA
 GCACTAAAAATTTATATCAGAAAAAGACAGCCAGCAAGCCTCACATGTTTCAAAGATCTTAATGAAAA
 TCACAGATCTCCGTAGCATCAGTGCTAAAGGTGCAGAGCGTGAATTACCTTGAAGTGGAAATTCCTGG
 ATCAATGCCACCTCTCATTCAAGAAATGCTGGAGAATTCTGAAGGACATGAACCTTGACCCCAAGTTCA
 AGTGGGAACACAGCAGAGCACAGTCTAGCATCTCACCCAGCTCAGTGGAAAACAGTGGGGTCAGTCAGT
 CACCACCTCGTCAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC209208 protein sequence
 Red=Cloning site Green=Tags(s)

MFDCMDVLSVSPGQILDFYTASPSSCMLQEKALKACFSGLTQTEWQHRHTAQSIETQSTSSEELVPSPPS
 PLPPPRVYKPCFVCQDKSSGYHYGVSACEGCKGFFRRSIQKNMIYCHRDKNCVINKVTRNRCQYCRLOK
 CFEVGMSESVRNDNRNKKKETSQECTESYEMTAELDDLTEKIRKAHQETFPSLCQLGKYTTNSSADHR
 VRLDLGLWDFSELATKCIKIVFAKRLPGFTGLTIADQITLLKAACLDILILRICTRYTPEQDTMTFS
 DGLTLNRTQMHNAGFGPLTDLVFTFANQLLPLEMDDTETGLLSAICLICGDRQDLEETPKVDKLEPLLE
 ALKIYIRKRRPSKPHMFPKILMKITDLRSISAKGAERVITLKMEIPGSMPLIQEMLENSEGHEPLTPSS
 SGNTEHSPSISPSSVENSQVSQSLVQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6147_b09.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_016152

ORF Size: 1344 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 Size: 2865 bp

RefSeq ORF: 1011 bp

Locus ID: 5915

UniProt ID: [P10826](#)

Cytogenetics: 3p24.2

Domains: HOLI, zf-C4

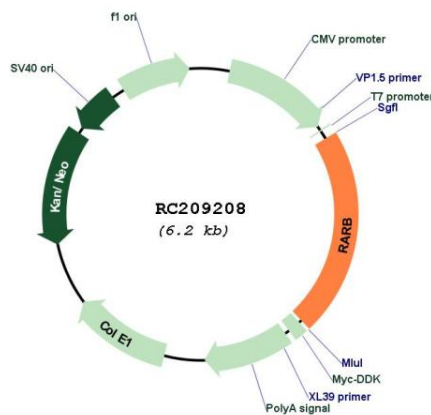
Protein Families: Druggable Genome, Nuclear Hormone Receptor, Transcription Factors

Protein Pathways: Non-small cell lung cancer, Pathways in cancer, Small cell lung cancer

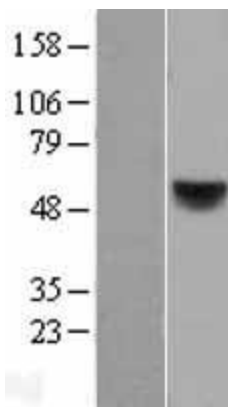
MW: 50.3 kDa

Gene Summary: This gene encodes retinoic acid receptor beta, a member of the thyroid-steroid hormone receptor superfamily of nuclear transcriptional regulators. This receptor localizes to the cytoplasm and to subnuclear compartments. It binds retinoic acid, the biologically active form of vitamin A which mediates cellular signalling in embryonic morphogenesis, cell growth and differentiation. It is thought that this protein limits growth of many cell types by regulating gene expression. The gene was first identified in a hepatocellular carcinoma where it flanks a hepatitis B virus integration site. Alternate promoter usage and differential splicing result in multiple transcript variants. [provided by RefSeq, Mar 2014]

Product images:



Circular map for RC209208



Western blot validation of overexpression lysate (Cat# [LY402510]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209208 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).