

Product datasheet for **RC217443**

Bile Acid Receptor (NR1H4) (NM_005123) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Bile Acid Receptor (NR1H4) (NM_005123) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Bile Acid Receptor
Synonyms:	BAR; FXR; HRR-1; HRR1; PFIC5; RIP14
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC217443 representing NM_005123
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGATCAAAAATGAATCTCATTGAACATTCCCATTACCTACCACAGATGAATTTTCTTTTCTGAAA
 ATTTATTTGGTGTTTAACAGAACAAGTGGCAGGTCTCTGGACAGAACCTGGAAGTGAACCATACTC
 GCAATACAGCAATGTTTCAGTTTCCCAAGTTCAACCACAGATTTCTCGTCATCCTATTATTCCAACCTG
 GTTTTCTACCCAGCAGCCTGAAGAGTGGTACTCTCTGGAATATATGAACTCAGGCGTATGCCAGCTG
 AGACTCTCTACCAGGGAGAACTGAGGTAGCAGAGATGCCTGTAACAAAGAAGCCCCGCATGGGCGCTC
 AGCAGGGAGGATCAAAGGGGATGAGCTGTGTGTTGTTTGTGGAGACAGAGCCTCTGGATACCACTATAAT
 GCACTGACCTGTGAGGGGTGTAAGGTTTCTTCAGGAGAAGCATTACAAAAACGCTGTGTACAAGTGA
 AAAACGGGGCAACTGTGTGATGGATATGTACATGCGAAGAAAGTGTCAAGAGTGTGACTAAGGAAATG
 CAAAGAGATGGGAATGTTGGCTGAATGCTTGTAACTGAAATTCAGTGTAAATCTAAGCGACTGAGAAAA
 AATGTGAAGCAGCATGCAGATCAGACCGTGAATGAAGACAGTGAAGGTCGTGACTTGCGACAAGTACCT
 CGACAACAAAGTCATGCAGGGAGAAAACGAACTCACCCAGATCAACAGACTCTTCTACATTTTATTAT
 GGATTCATATAACAAACAGAGGATGCCTCAGGAAATAACAAATAAAATTTTAAAAGAAGAATTCAGTGCA
 GAAGAAAATTTTCTATTTTACCGGAAATGGCAACCAATCATGTACAGGTTCTTGTAGAATTCACAAAAA
 AGCTACCAGGATTTGAGACTTTGGACCATGAAGACCAGATTGCTTTGCTGAAAGGTCGCGGTTGAAGC
 TATGTTCTTCGTTTCAGCTGAGATTTTCAATAAGAAACTCCGCTGGGCATTCTGACCTATTGGAAGAA
 AGAATTCGAAATAGTGGTATCTCTGATGAATATATAACACCTATGTTTAGTTTTATAAAAGTATTGGGG
 AACTGAAAATGACTCAAGAGGAGTATGCTCTGCTTACAGCAATTGTTATCCTGTCCAGATGACAAATA
 CATAAAGGATAGAGAGGCAGTAGAGAAGCTTCAGGAGCCACTTCTTGATGTGCTACAAAAGTTGTGTAAG
 ATTCACCAGCCTGAAAATCCTCAACACTTTGCCTGTCTCCTGGGTCGCTGACTGAATTACGGACATTCA
 ATCATACCACGCTGAGATGCTGATGTCATGGAGAGTAAACGACCACAAGTTTACCCCACTTCTCTGTGA
 AATCTGGGACGTGCAG

ACGCGTACGCGGCCGCTCGAGCAGAAAACATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC217443 representing NM_005123
 Red=Cloning site Green=Tags(s)

MGSKMNLIEHSHLPTTDEFSENLFGVLTQVAGPLGQNLVEVPYSQYSNVQFPVQVQPISSSSYYSNL
 GFYPQQPEEWYSPGIYELRRMPAETLYQGETEVAEMPVTKKPRMGASAGRIKGDLCVVCGRASGYHYN
 ALTCEGCKGFFRRSITKNAVYKCKNGGNCVMDMYMRRKCQECRLRKCKEMGLAECLLTEIQCKSKRLRK
 NVKQHADQTVNEDSEGRDLRQVTSTTKSCREKTELTDPDQQTLLHFIMDSYNKQRMPEITNKILKEEFSA
 EENFLILTEMATNHVQVLVEFTKLPGFQTLDHEDQIALLKGSVAEAMFLRSAEIFNKKLPSGHSDLLEE
 RIRNSGISDEYITPMFSFYKISIGELKMTQEEYALLTAIVILSPDRQYIKDREAVEKLEPILLDVLQKLC
 IHQPENPQHFAELLGRLTELRTFNHHAEMLSWRVNDHKFTPLLCEIWDVQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6046_e01.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_005123

ORF Size: 1416 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

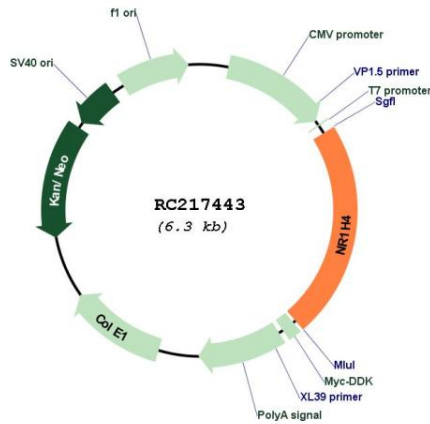
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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).

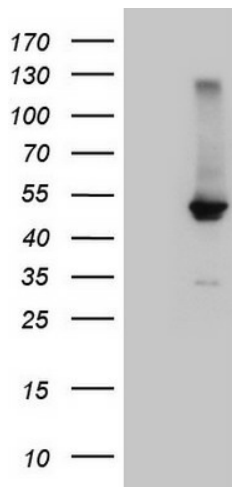
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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:	<u>NM_005123.4</u>
RefSeq Size:	2218 bp
RefSeq ORF:	1419 bp
Locus ID:	9971
UniProt ID:	<u>Q96R11</u>
Cytogenetics:	12q23.1
Domains:	HOLI, zf-C4
Protein Families:	Druggable Genome, Nuclear Hormone Receptor, Transcription Factors
MW:	54.2 kDa
Gene Summary:	This gene encodes a ligand-activated transcription factor that shares structural features in common with nuclear hormone receptor family members. This protein functions as a receptor for bile acids, and when bound to bile acids, binds to DNA and regulates the expression of genes involved in bile acid synthesis and transport. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq, Feb 2016]

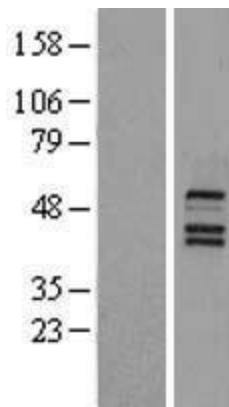
Product images:



Circular map for RC217443



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY NR1H4 (Cat# RC217443, 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-NR1H4 (Cat# [TA809306])(1:2000). Positive lysates [LY401577] (100ug) and [LC401577] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401577]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217443 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).