

Product datasheet for **RC201336**

NR2F6 (NM_005234) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	NR2F6
Synonyms:	EAR-2; EAR2; ERBAL2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC201336 representing NM_005234 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCATGGTGACCGCGGCTGGGGCGGCCCGCGGCGACACGAACGGCGTGGACAAGCGGGCGGCT
ACCCGCGCGCGGCCGAGGACGACTCGGCCCTCGCCCCCGGTGCCGCCAGCGACGCCGAGCCGGCGACGA
GGAGCGGCCGGGGCTGCAGGTGGACTGCGTGGTGTGCGGGGACAAGTCGAGCGGCAAGCATTACGGTGTC
TTCACCTGCGAGGGCTGCAAGAGCTTTTCAAGCGAAGCATCCGCCGAACCTCAGCTACACCTGCCGCT
CCAACCGTGACTGCCAGATCGACCAGCACACCAGGAACAGTGCCAGTACTGCCGTCTCAAGAAGTGCTT
CCGGGTGGGCATGAGGAAGGAGGCGGTGCAGCGCGGCCGCATCCCGCACTCGCTGCCTGGTGCCGTGGCC
GCCTCCTCGGGCAGCCCCCGGGCTCGGCGCTGGCGGCGAGTGGCGAGCGCGGAGACCTCTTCCCGGGC
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CGCAGGGGGCGGCGCGGGCGCGGTGCTGGGCATCGACAACGTGTGCGAGCTGGCGGCGCGGCTGCTC
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TGCTGCGCCTGAGCTGGAGCGAGCTCTTCGTGCTGAACGCGGCGCAGGCGGCGCTGCCCTGCACACGGC
GCCGCTACTGGCGCGGCCGCTCCACGCGCGCCTATGGCCGCCGAGCGCGCGTGGCTTTCATGGAC
CAGGTGCGCGCCTTCAGGAGCAGGTGGACAAGCTGGGCGCCTGCAGGTGAGTCCGCGGAGTATGGCT
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GCAGGAGAAGGCGCAGGTGGCCCTACCGAGTATGTGCGGGCGCAGTACCGTCCAGCCCCAGCGCTTC
GGGCGCCTGCTGCTGCGGCTCCCCGCCCTGCGCGCGGTCCCTGCCTCCCTCATCTCCAGCTGTTCTTCA
TGCGCCTGGTGGGAAGACGCCATTGAGACACTGATCAGAGACATGCTGCTGTCGGGGAGTACCTTCAA
CTGGCCCTACGGCTCGGGCCAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC201336 representing NM_005234
Red=Cloning site Green=Tags(s)

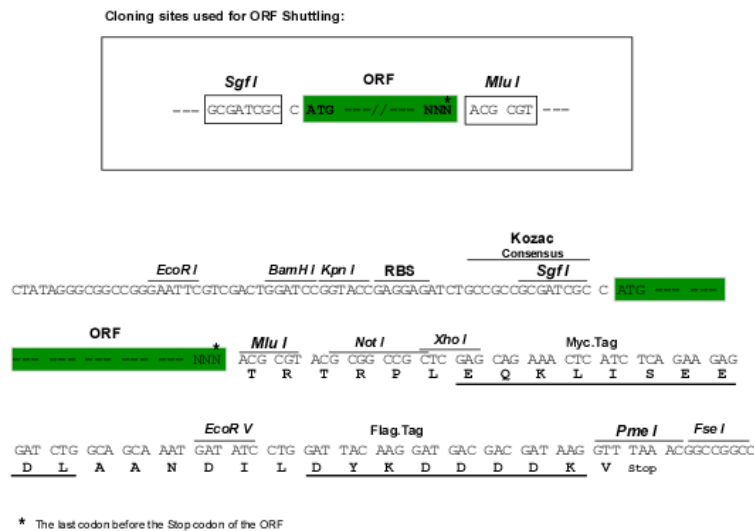
MAMVTGGWGGPGGDTNGVDKAGGYPRAAEDDSASPPGAASDAEPGDEERPGLQVDCVVCGBKSSGKHYGV
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 ASSGSPPGSALAAVASGGDLFPQPVSELIAQLLRAEPYAAAAGRFAGGGAAGAVLGIDNVCELAARLL
 FSTVEWARHAPFFPELPVADQVALLRLSWSELFVLNAAQAALPLHTAPLLAAAGLHAAPMAAERAVAFMD
 QVRAFQEYQVDKLGRLLQVDSAEYGCCLKAIALFTPDACGLSDPAHVESLQEKAQVALTEYVRAQYPSQPQRF
 GRLLLLRLPALRAVPASLISQLFFMRLVGKTPKETLIRDMLLSGSTFNWPYGSQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2549_a08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005234

ORF Size: 1212 bp

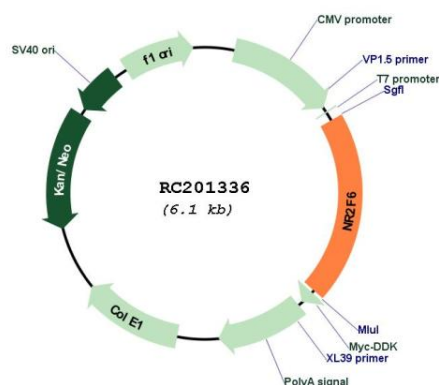
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

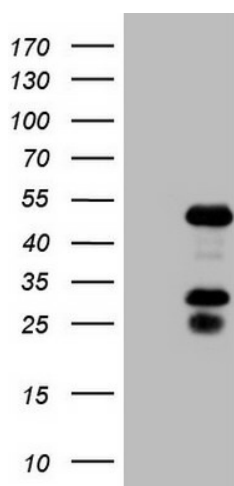
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none"> 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_005234.3, NP_005225.2</u>
RefSeq Size:	1804 bp
RefSeq ORF:	1215 bp
Locus ID:	2063
UniProt ID:	<u>P10588</u>
Cytogenetics:	19p13.11
Domains:	HOLI, zf-C4
Protein Families:	Druggable Genome, Nuclear Hormone Receptor, Transcription Factors
MW:	42.8 kDa
Gene Summary:	<p>Transcription factor predominantly involved in transcriptional repression. Binds to promoter/enhancer response elements that contain the imperfect 5'-AGGTCA-3' direct or inverted repeats with various spacings which are also recognized by other nuclear hormone receptors. Involved in modulation of hormonal responses. Represses transcriptional activity of the lutropin-choriogonadotropic hormone receptor/LHCGR gene, the renin/REN gene and the oxytocin-neurophysin/OXT gene. Represses the triiodothyronine-dependent and -independent transcriptional activity of the thyroid hormone receptor gene in a cell type-specific manner. The corepressing function towards thyroid hormone receptor beta/THRB involves at least in part the inhibition of THRB binding to triiodothyronine response elements (TREs) by NR2F6. Inhibits NFATC transcription factor DNA binding and subsequently its transcriptional activity. Acts as transcriptional repressor of IL-17 expression in Th-17 differentiated CD4(+) T cells and may be involved in induction and/or maintenance of peripheral immunological tolerance and autoimmunity. Involved in development of forebrain circadian clock; is required early in the development of the locus coeruleus (LC).</p> <p>[UniProtKB/Swiss-Prot Function]</p>

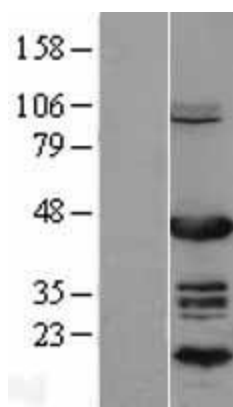
Product images:



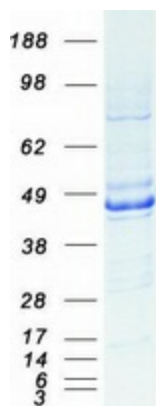
Circular map for RC201336



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY NR2F6 (Cat# RC201336, 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-NR2F6 (Cat# [TA806787]). Positive lysates [LY401603] (100ug) and [LC401603] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401603]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201336 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NR2F6 protein (Cat# [TP301336]). The protein was produced from HEK293T cells transfected with NR2F6 cDNA clone (Cat# RC201336) using MegaTran 2.0 (Cat# [TT210002]).