

Product datasheet for RC212235

NCOA2 (NM_006540) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NCOA2 (NM_006540) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NCOA2
Synonyms:	bHLHe75; GRIP1; KAT13C; NCoA-2; SRC2; TIF2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC212235 representing NM_006540 Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence: >RC212235 representing NM_006540
 Red=Cloning site Green=Tags(s)

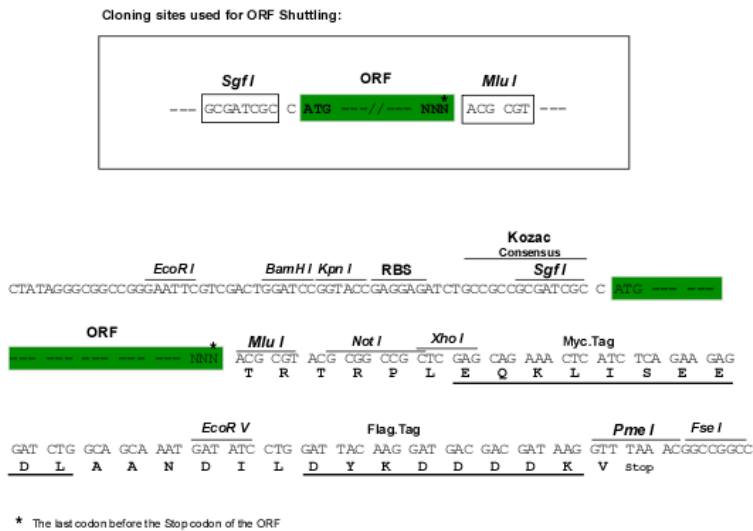
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Chromatograms: https://cdn.origene.com/chromatograms/mk6204_h06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006540

ORF Size: 4392 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: [NM_006540.4](#)

RefSeq Size: 6157 bp

RefSeq ORF: 4395 bp

Locus ID: 10499

UniProt ID: [Q15596](#)

Cytogenetics: 8q13.3

Domains: PAS, HLH

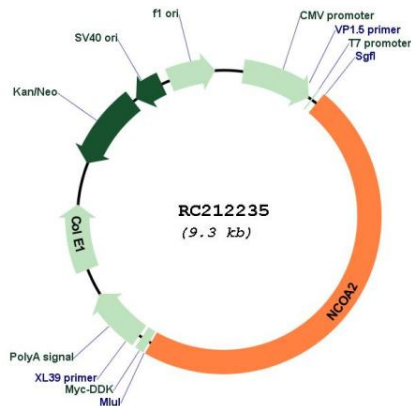
Protein Families: Druggable Genome

MW: 159 kDa

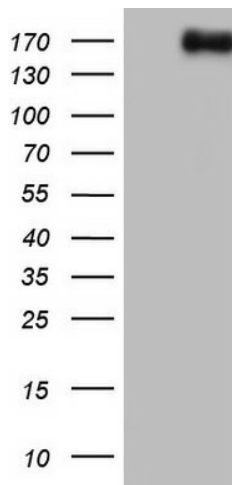
Gene Summary:

The protein encoded by this gene functions as a transcriptional coactivator for nuclear hormone receptors, including steroid, thyroid, retinoid, and vitamin D receptors. The encoded protein acts as an intermediary factor for the ligand-dependent activity of these nuclear receptors, which regulate their target genes upon binding of cognate response elements. This gene has been found to be involved in translocations that result in fusions with other genes in various cancers, including the lysine acetyltransferase 6A (KAT6A) gene in acute myeloid leukemia, the ETS variant 6 (ETV6) gene in acute lymphoblastic leukemia, and the hes related family bHLH transcription factor with YRPW motif 1 (HEY1) gene in mesenchymal chondrosarcoma. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2016]

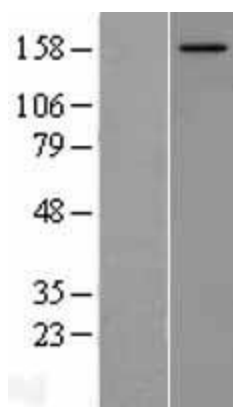
Product images:



Circular map for RC212235



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY NCOA2 (Cat# RC212235, 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-NCOA2(Cat# [TA805128]). Positive lysates [LY401959] (100ug) and [LC401959] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401959]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212235 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).