

Product datasheet for **RC200356**

NOLC1 (NM_004741) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NOLC1 (NM_004741) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NOLC1
Synonyms:	NOPP130; NOPP140; NS5ATP13; P130; Srp40
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC200356 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

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AG**GCGACCG**ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC200356 protein sequence
Red=Cloning site Green=Tags(s)

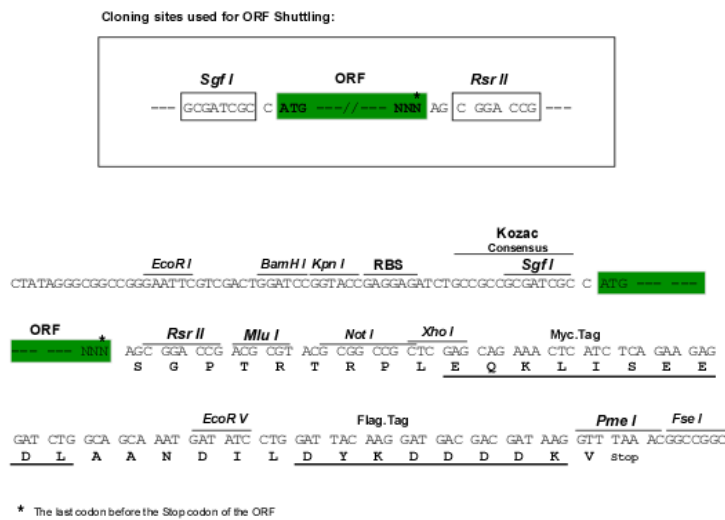
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SGPTRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6185_a12.zip

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_004741

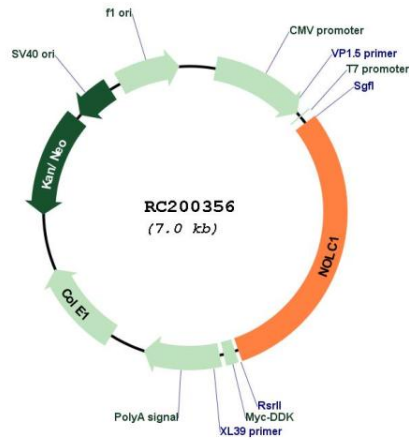
ORF Size: 2100 bp

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](#)

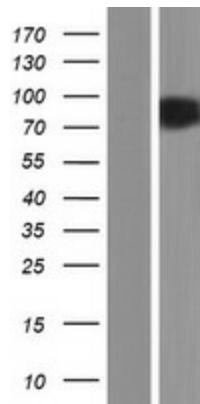
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.
RefSeq:	<u>NM_004741.5</u>
RefSeq Size:	3947 bp
RefSeq ORF:	2100 bp
Locus ID:	9221
UniProt ID:	<u>Q14978</u>
Cytogenetics:	10q24.32
Domains:	SRP40_C
Protein Families:	Stem cell - Pluripotency
MW:	73.7 kDa
Gene Summary:	Nucleolar protein that acts as a regulator of RNA polymerase I by connecting RNA polymerase I with enzymes responsible for ribosomal processing and modification (PubMed:10567578, PubMed:26399832). Required for neural crest specification: following monoubiquitination by the BCR(KBTBD8) complex, associates with TCOF1 and acts as a platform to connect RNA polymerase I with enzymes responsible for ribosomal processing and modification, leading to remodel the translational program of differentiating cells in favor of neural crest specification (PubMed:26399832). Involved in nucleologenesis, possibly by playing a role in the maintenance of the fundamental structure of the fibrillar center and dense fibrillar component in the nucleolus (PubMed:9016786). It has intrinsic GTPase and ATPase activities (PubMed:9016786).[UniProtKB/Swiss-Prot Function]

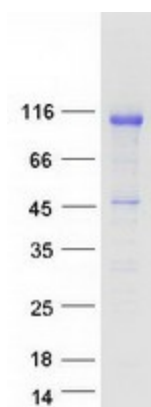
Product images:



Circular map for RC200356



Western blot validation of overexpression lysate (Cat# [LY401495]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200356 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NOLC1 protein (Cat# [TP300356]). The protein was produced from HEK293T cells transfected with NOLC1 cDNA clone (Cat# RC200356) using MegaTran 2.0 (Cat# [TT210002]).