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Product datasheet for RC223316

JMJD7-PLA2G4B (NM_005090) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	JMJD7-PLA2G4B (NM_005090) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	JMJD7-PLA2G4B
Synonyms:	cPLA2-beta; HsT16992
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC223316 representing NM_005090
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGGAGGCGGCTTTGGAAGCCGTGCGGAGCGAGTTACGAGAATTCCCGGCCGCTGCAAGGGAGCTCT
GCGTGCCTCTTGCTGTGCCCTACCTGGACAAACCCCCAACTCCGCTCCACTTCTACCGGGACTGGGTCTG
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GGGCCGGGCCCAGCACCCTGGAGTCCTCTATGTGCAGAAGCAGTGCTCCAACCTGCCCAGCGAGCTGCCC
CAGCTGCTGCCTGATCTGGAATCCCATGTGCCCTGGGCCTCCGAAGCCCTGGGAAAGATGCCCGATGCTG
TGAACTTCTGGCTGGGGGAGGCGGCTGCAGTGACTTCTTTGCACAAGGACCACTATGAGAACCTCTACTG
CGTGGTCTCAGGAGAGAAGCATTTCCTGTTCCATCCGCCCAGCGACCGGCCCTTCATCCCCTATGAGCTG
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CCCTGTGCAGAGGAGCAGGCCTTCCTGAGCAGGAGGAAGCAGGTGGTGGCCGCGGCCTTGAGGCAGGCCC
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Protein Sequence:

>RC223316 representing NM_005090
Red=Cloning site Green=Tags(s)

MAEAALEAVRSELREFPAAARELCVPLAVPYLDKPPTPLHFYRDWVCPNRPCIIRNALQHWPALQKWSLP
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LHLTHYNVCNNQEQLLEALRQAVQRRRQRRPH

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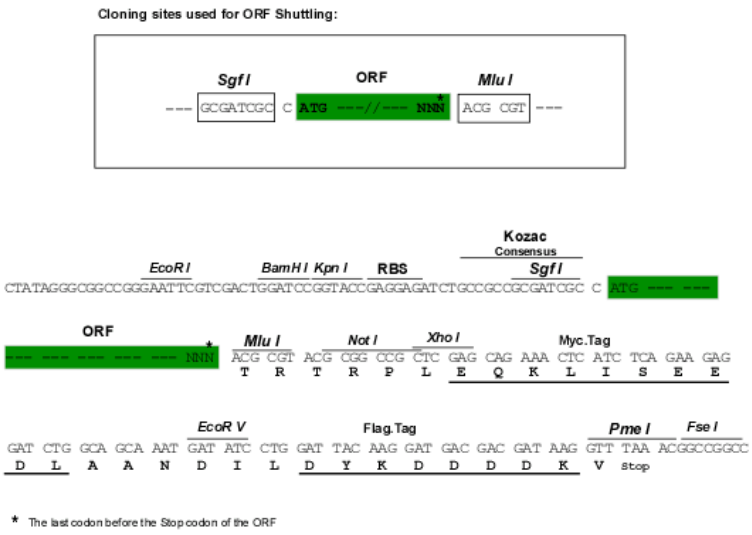
Chromatograms: https://cdn.origene.com/chromatograms/mk6684_a09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN:	NM_005090
ORF Size:	3036 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:	NM_005090.3
RefSeq Size:	3352 bp
RefSeq ORF:	3039 bp
Locus ID:	8681

UniProt ID: P0C869

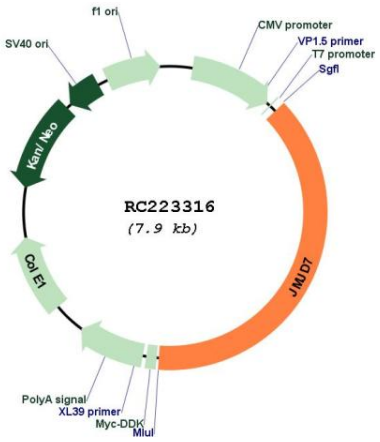
Cytogenetics: 15q15.1

Protein Pathways: alpha-Linolenic acid metabolism, Arachidonic acid metabolism, Ether lipid metabolism, Fc epsilon RI signaling pathway, Glycerophospholipid metabolism, GnRH signaling pathway, Linoleic acid metabolism, Long-term depression, MAPK signaling pathway, Metabolic pathways, Vascular smooth muscle contraction, VEGF signaling pathway

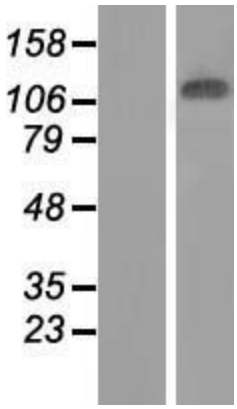
MW: 113.9 kDa

Gene Summary: This locus represents naturally-occurring readthrough transcription between the neighboring jumonji domain containing 7 (JMJD7) and phospholipase A2, group IVB (cytosolic) (PLA2G4B) genes. Readthrough transcripts encode fusion proteins that share amino acid sequence with each individual gene product, including a partial JmjC domain and downstream C2 and phospholipase A2 domains. Alternatively spliced transcript variants have been observed. [provided by RefSeq, Oct 2013]

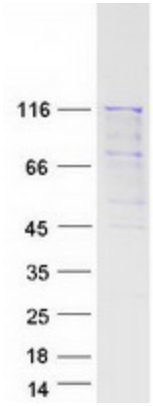
Product images:



Circular map for RC223316



Western blot validation of overexpression lysate (Cat# [LY417529]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223316 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified JMJD7-PLA2G4B protein (Cat# [TP323316]). The protein was produced from HEK293T cells transfected with JMJD7-PLA2G4B cDNA clone (Cat# RC223316) using MegaTran 2.0 (Cat# [TT210002]).