

## Product datasheet for RC200242

### HRASLS3 (PLA2G16) (NM\_007069) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** HRASLS3 (PLA2G16) (NM\_007069) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** PLAAT3  
**Synonyms:** AdPLA; H-REV107; H-REV107-1; HRASLS3; HREV107; HREV107-1; HREV107-3; HRSL3; PLA2G16; PLAAT-3  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RC200242 representing NM\_007069  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCGTGCGCCATTCCAGAGCCTAAGCCTGGAGACCTGATTGAGATTTTCGCCCTTTCTACAGACACT  
GGGCCATCTATGTTGGCGATGGATATGTGGTTCATCTGGCCCTCCAAGTGAGGTCGAGGAGCTGGTGC  
AGCCAGTGTATGTCGCCCTGACTGACAAGGCCATCGTGAAGAAGGAATTGCTGTATGATGTGGCCGGG  
AGTGACAAGTACCAGGTCAACAACAACATGATGACAAGTACTCGCCGCTGCCCTGCAGCAAATCATCC  
AGCGGGCGGAGGAGCTGGTGGGGCAGGAGGTGCTCTACAAGCTGACCAGTGAGAAGTGCAGCACATTTGT  
GAATGAGCTGCGCTATGGAGTCGCCCGCAGTGACCAGGTGAGAGATGTCATCATCGCTGCAAGCGTTGCA  
GGAATGGCTTGGCAGCCATGAGCCTTATTGGAGTCATGTTCTCAAGAAACAAGCGACAAAAGCAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC200242 representing NM\_007069  
Red=Cloning site Green=Tags(s)

MRAPIPEPKPGDLIEIFRPFYRHWAIYVGDGYVVHLAPPSEVAGAGAASVMSALTDKAIIVKHELLYDVAG  
SDKYQVNNKHDDKYSPLPCSKIIQRAEELVQEVLYKLTSENCEHFVNELRYGVARSQVDRDVIIAASVA  
GMGLAAMSLIGVMFSRNKRQKQ

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

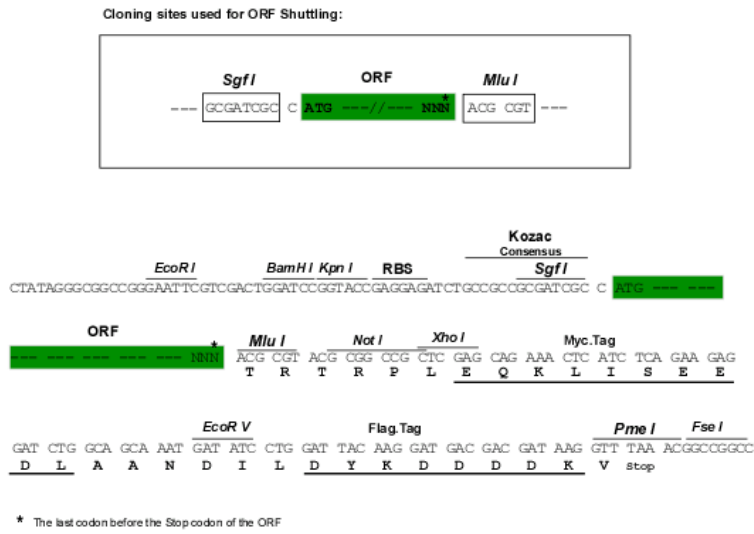
**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6385\\_c03.zip](https://cdn.origene.com/chromatograms/mk6385_c03.zip)



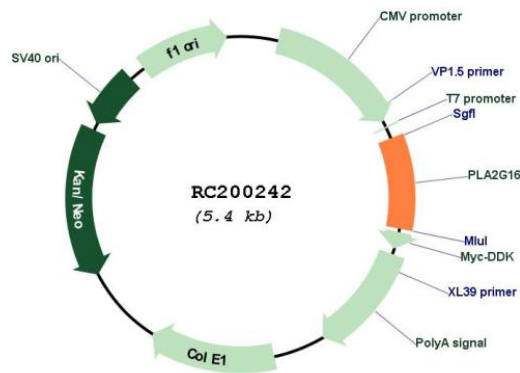
[View online »](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



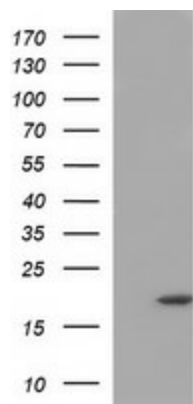
ACCN: NM\_007069

ORF Size: 486 bp

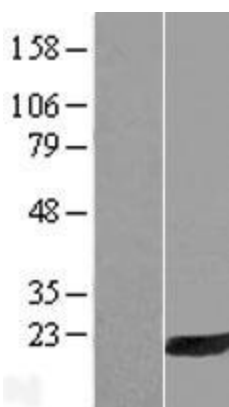
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially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

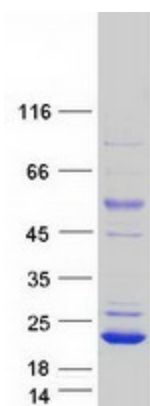
<b>Components:</b>	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_007069.3</a>
<b>RefSeq Size:</b>	1070 bp
<b>RefSeq ORF:</b>	489 bp
<b>Locus ID:</b>	11145
<b>UniProt ID:</b>	<a href="#">P53816</a>
<b>Cytogenetics:</b>	11q12.3-q13.1
<b>Domains:</b>	NC
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>MW:</b>	17.9 kDa
<b>Gene Summary:</b>	Exhibits both phospholipase A1/2 and acyltransferase activities (PubMed:19615464, PubMed:19047760, PubMed:22825852, PubMed:22605381, PubMed:26503625). Shows phospholipase A1 (PLA1) and A2 (PLA2) activity, catalyzing the calcium-independent release of fatty acids from the sn-1 or sn-2 position of glycerophospholipids (PubMed:19615464, PubMed:19047760, PubMed:22825852, PubMed:22605381, PubMed:22923616). For most substrates, PLA1 activity is much higher than PLA2 activity (PubMed:19615464). Shows O-acyltransferase activity, catalyzing the transfer of a fatty acyl group from glycerophospholipid to the hydroxyl group of lysophospholipid (PubMed:19615464). Shows N-acyltransferase activity, catalyzing the calcium-independent transfer of a fatty acyl group at the sn-1 position of phosphatidylcholine (PC) and other glycerophospholipids to the primary amine of phosphatidylethanolamine (PE), forming N-acylphosphatidylethanolamine (NAPE), which serves as precursor for N-acylethanolamines (NAEs) (PubMed:19615464, PubMed:19047760, PubMed:22825852, PubMed:22605381). Exhibits high N-acyltransferase activity and low phospholipase A1/2 activity (PubMed:22825852).[UniProtKB/Swiss-Prot Function]

**Product images:**


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PLA2G16 (Cat# RC200242, 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-PLA2G16 (Cat# [TA506908]). Positive lysates [LY416202] (100ug) and [LC416202] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY426918]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC225152] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PLAAT3 protein (Cat# [TP300242]). The protein was produced from HEK293T cells transfected with PLAAT3 cDNA clone (Cat# RC200242) using MegaTran 2.0 (Cat# [TT210002]).