

## Product datasheet for **RC206444**

### EDG4 (LPAR2) (NM\_004720) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	EDG4 (LPAR2) (NM_004720) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EDG4
Synonyms:	EDG-4; EDG4; LPA-2; LPA2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC206444 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGTCATCATGGCCAGTGTCTACTACAACGAGACCATCGGCTTCTTCTATAACAACAGTGGCAAAGAGC  
TCAGCTCCACTGGCGGCCAAGGATGTGGTCGTGGTGGCACTGGGGCTGACCGTCAGCGTGTGGTGT  
GCTGACCAATCTGCTGGTCATAGCAGCCATCGCCTCCAACCGCCGCTTCCACCAGCCCATCTACTACCTG  
CTCGGCAATCTGGCCGGCTGACCTCTTCGGGGCGTGGCTACCTTCTCTCATGTTCCACACTGGTC  
CCCGCACAGCCGACTTTCACTTGAGGGTGGTTCCTGCGGCAGGGCTTGTGGACACAAGCCTCACTGC  
GTGGTGGCCACACTGCTGGCCATCGCCGTGGAGCGGCACCGCAGTGTGATGGCCGTGCAGCTGCACAGC  
CGCCTGCCCGTGGCCGGTGGTCATGCTCATTGTGGCGTGTGGTGGCTGCCCTGGGCCCTGGGGCTGC  
TGCCCTGCCACTCCTGGCACTGCCTCTGTGCCCTGGACCGCTGCTCACGCATGGCACCCCTGCTCAGCCG  
CTCCTATTTGGCCGTCTGGGCTCTGTGAGCCTGCTTGTCTTCTGCTCATGGTGGCTGTGTACACCCGC  
ATTTTCTTCTACGTGGCGCGGAGTGCAGCGCATGGCAGAGCATGTGAGCTGCCACCCCGCTACCGAG  
AGACCAGCTCAGCCTGGTCAAGACTGTTGTATCATCTGGGGCGTTCGTGGTCTGCTGGACACCAGG  
CCAGGTGGTACTGCTCCTGGATGGTTAGGCTGTGAGTCTGCAATGCTCTGGCTGTAGAAAAGTACTTC  
CTACTGTTGGCCGAGGCCAACTCACTGGTCAATGCTGCTGTGACTCTTGCCGAGATGCTGAGATGCGCC  
GCACCTTCGCGCCCTTCTCTGCTGCGCGTGCCTCCGCCAGTCCACCCGCGAGTCTGTCCACTATACATC  
CTCTGCCAGGGAGGTGCCAGCACTCGCATCATGCTTCCCGAGAACGCCACCCACTGATGGACTCCACC  
CTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTAA



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**Protein Sequence:** >RC206444 protein sequence  
Red=Cloning site Green=Tags(s)

MVIMGQCYNETIGFFYNNSGKELSSHWRPKDVVVVALGLTVSVLVLLTNLLVIAAIASNRRFHQPIYYL  
 LGNLAADLFAGVAYLFLMFHTGPRTARLSLEGWFLRQGLDLSLTASVATLLAIAVERHRSMVAVQLHS  
 RLPGRVVMLIVGVVVAALGLGLLPAHSHWCLCALDRCSRMAPLLSRSYLAVWALSSLLVFLLMVAVYTR  
 IFFYVRRRVQRMAEHVSCHPRYRETTLSLVKTVVILGAFVVCWTPGQVVLVLLDGLGCESCNLVAVEKYF  
 LLLAEANSLVNAAYVSCRDAEMRRTRFRLLCCACLRSQSTRESVHYTSSAQGGASTRIMLPENGHPLMDST  
 L

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6016\\_b07.zip](https://cdn.origene.com/chromatograms/mk6016_b07.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_004720

**ORF Size:** 1053 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\\_004720.6](#)

**RefSeq Size:** 1803 bp

**RefSeq ORF:** 1056 bp

**Locus ID:** 9170

**UniProt ID:** [Q9HBW0](#)

**Cytogenetics:** 19p13.11

**Domains:** 7tm\_1

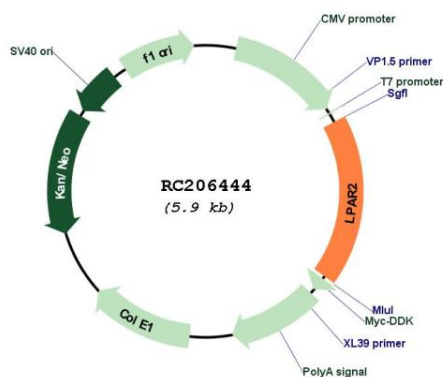
**Protein Families:** Druggable Genome, GPCR, Transmembrane

**Protein Pathways:** Neuroactive ligand-receptor interaction

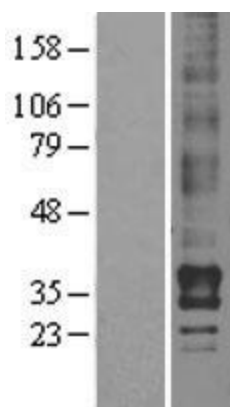
**MW:** 39.1 kDa

**Gene Summary:** This gene encodes a member of family I of the G protein-coupled receptors, as well as the EDG family of proteins. This protein functions as a lysophosphatidic acid (LPA) receptor and contributes to Ca<sup>2+</sup> mobilization, a critical cellular response to LPA in cells, through association with Gi and Gq proteins. An alternative splice variant has been described but its full length sequence has not been determined. [provided by RefSeq, Jul 2008]

## Product images:



Circular map for RC206444



Western blot validation of overexpression lysate (Cat# [LY401490]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206444 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).