

Product datasheet for **RC220075**

67kDa Laminin Receptor (RPSA) (NM_001012321) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	67kDa Laminin Receptor (RPSA) (NM_001012321) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	67kDa Laminin Receptor
Synonyms:	37LRP; 67LR; ICAS; LAMBR; lamR; LAMR1; LBP; LBP/p40; LRP; LRP/LR; NEM/1CHD4; p40; SA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC220075 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCCGGAGCCCTTGATGTCTGCAAATGAAGGAGGAGGATGTCCTTAAGTTCCTTGCAGCAGGAACCC
ACTTAGGTGGACCAATCTTGACTTCCAGATGGAACAGTACATCTATAAAGGAAAAGTGATGGCATCTA
TATCATAAATCTCAAGAGGACCTGGGAGAAGCTTCTGCTGGCAGCTCGTGCAATTGTTGCCATTGAAAAC
CCTGCTGATGTCAGTGTTATATCCTCCAGGAATACTGGCCAGAGGGCTGTGCTGAAGTTTGCTGCTGCCA
CTGGAGCCACTCCAATTGCTGGCCGCTTCACTCCTGGAACCTTCACTAACCAGATCCAGGCAGCCTTCGG
GGAGCCACGGCTTCTTGTGGTTACTGACCCAGGGCTGACCACAGCCTCTCACGGAGGCATCTTATGTT
AACCTACCTACCATTGCGCTGTGTAACACAGATTCTCCTCTGCGCTATGTGGACATTGCCATCCCATGCA
ACAACAAGGGAGCTCACTCAGTGGGTTTGATGTGGTGGATGCTGGCTCGGGAAGTTCTGCGCATGCGTGG
CACCATTTCCTGTAACACCCATGGGAGGTCATGCCTGATCTGTACTTCTACAGAGATCCTGAAGAGATT
GAAAAAGAAGGGCAGGCTGCTGCTGAGAAGGCAGTGACCAAGGAGGAATTCAGGGTGAATGGACTGCTC
CCGCTCCTGAGTTCAGTCTACTCAGCCTGAGGTTGCAGACTGGTCTGAAGGTGTACAGGTGCCCTCTGT
GCCTATTCAGCAATTCCTACTGAAGACTGGAGCGCTCAGCCTGCCACGGAAGACTGGTCTGCAGCTCCC
ACTGCTCAGGCCACTGAATGGTAGGAGCAACCACTGACTGGTCT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC220075 protein sequence
 Red=Cloning site Green=Tags(s)

MSGALDVLQMKEEDVLKFLAAGTHLGGTNLDFQMEQYIYKRKSDGIYIINLKRTWEKLLLAARAIVAIEN
 PADVSVISSRNTGQRAVLKFAAATGATPIAGRFTPGTFTNQIQAAFREPRLLVVTDPRAHQPLTEASYV
 NLPTIALCNTDSPLRYVDIAIPCNNKGHSVGLMWWMLAREVLRMRGTISREHPWEVMPDLYFYRDP EEI
 EKEGQAAAEKAVTKEEFQGEWTAPAPEFTATQPEVADWSEGVQVPSVPIQQFPTEDWSAQPATEDWSAAP
 TAQATEWVGATTDWS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6529_g07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001012321

ORF Size: 885 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: NM_001012321.1, NP_001012321.1

RefSeq Size: 1109 bp

RefSeq ORF: 888 bp

Locus ID: 3921

Cytogenetics: 3p22.1

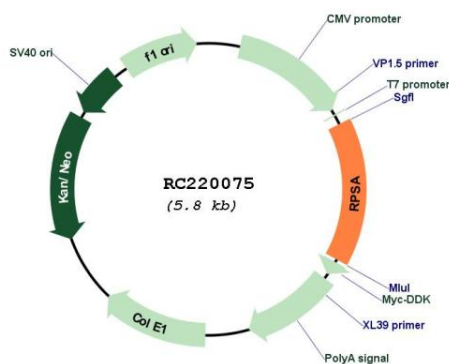
Protein Families: Druggable Genome

Protein Pathways: Ribosome

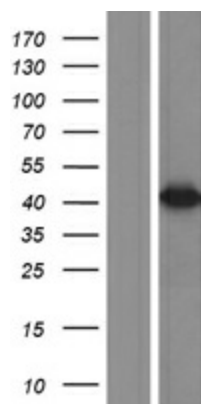
MW: 32.8 kDa

Gene Summary: Laminins, a family of extracellular matrix glycoproteins, are the major noncollagenous constituent of basement membranes. They have been implicated in a wide variety of biological processes including cell adhesion, differentiation, migration, signaling, neurite outgrowth and metastasis. Many of the effects of laminin are mediated through interactions with cell surface receptors. These receptors include members of the integrin family, as well as non-integrin laminin-binding proteins. This gene encodes a high-affinity, non-integrin family, laminin receptor 1. This receptor has been variously called 67 kD laminin receptor, 37 kD laminin receptor precursor (37LRP) and p40 ribosome-associated protein. The amino acid sequence of laminin receptor 1 is highly conserved through evolution, suggesting a key biological function. It has been observed that the level of the laminin receptor transcript is higher in colon carcinoma tissue and lung cancer cell line than their normal counterparts. Also, there is a correlation between the upregulation of this polypeptide in cancer cells and their invasive and metastatic phenotype. Multiple copies of this gene exist, however, most of them are pseudogenes thought to have arisen from retropositional events. Two alternatively spliced transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jul 2008]

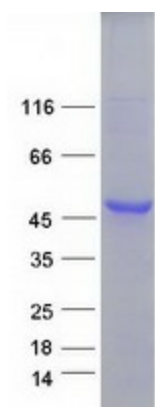
Product images:



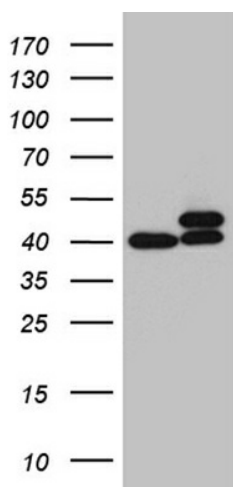
Circular map for RC220075



Western blot validation of overexpression lysate (Cat# [LY423324]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220075 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RPSA protein (Cat# [TP320075]). The protein was produced from HEK293T cells transfected with RPSA cDNA clone (Cat# RC220075) using MegaTran 2.0 (Cat# [TT210002]).



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY RPSA (Cat# RC220075, 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-RPSA (Cat# [TA811423]). Positive lysates [LY423324] (100ug) and [LC423324] (20ug) can be purchased separately from OriGene.