

Product datasheet for RC220589

ALR (GFER) (NM_005262) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ALR (GFER) (NM_005262) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ALR
Synonyms:	ALR; ERV1; HERV1; HPO; HPO1; HPO2; HSS; MMCHD; MPMCD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC220589 representing NM_005262 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGCGGCGCCCGGCGAGCGGGCCGCTTCCACGGCGGGAACCTCTTCTCCTGCCGGGGGCGCGCGCT
 CCGAGATGATGGACGACCTGGCGACGACGCGGGGCCGGGGCGCGGGCGGAGAGACGCGGCCGCTC
 GGCTCGACGCCAGCCAGGCGCCGACCTCCGATTCTCCTGTGCGCGAGGACGCTCCCGAGGCGGCCG
 TGCCGGGCTGCGTCGACTTCAAGACGTGGATGCGGACGACGAGAAGCGGGACCAAGTTTAGGGAGG
 ACTGCCCGCCGGATCGCGAGGAAGTGGGCGCCACAGCTGGGCTGTCTCCACACCTGGCCGCTACTA
 CCCCAGCTGCCACCCAGAACAGCAGCAAGACATGGCCAGTTCATACATTTATTTCTAAGTTTAC
 CCCTGTGAGGAGTGTGCTGAAGACCTAAGAAAAAGGCTGTGCAGGAACCCAGACACCCGACCCGGG
 CATGCTTCACACAGTGGCTGTGCCACCTGCACAATGAAGTGAACCGCAAGCTGGGCAAGCCTGACTTCGA
 CTGCTCAAAAGTGGATGAGCGCTGGCGCGACGGCTGGAAGGATGGCTCCTGTGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC220589 representing NM_005262 Red=Cloning site Green=Tags(s)
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MAAPGERGRFHGGLFFLPGGARSEMDDLATDARGRGARRDAAASASTPAQAPTS DSPVAEDASRRRP
 CRACVDFKTMRTQQKRDTKFREDCPPDREELGRHSWAVLHTLAAYYPDLPTPEQQDMAQFIHLFSKFY
 PCEEAEDLRKRLCRNHPDTRTRACFTQWLCHLHNEVNRKLGKPDFDCSKVDERWRDGWKDGSCD

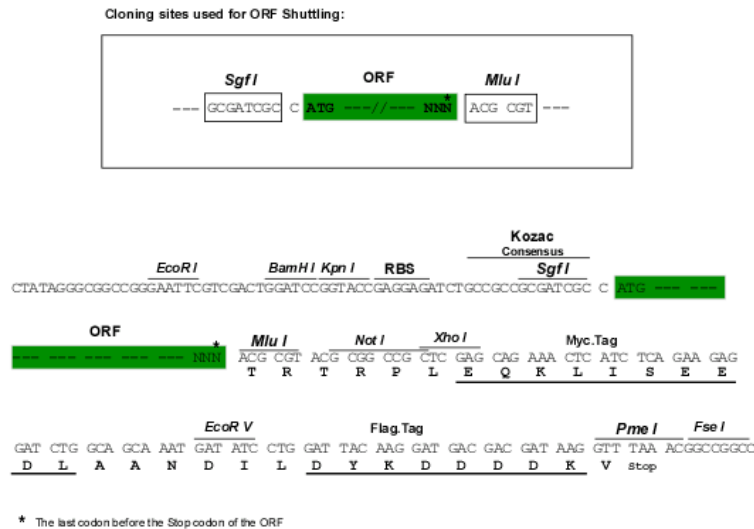
TRTRPLEQKLISEEDLAANDILDYKDDDDKV


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Chromatograms: https://cdn.origene.com/chromatograms/mk6096_b06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005262

ORF Size: 615 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_005262.3](#)

RefSeq Size: 2447 bp

RefSeq ORF: 618 bp

Locus ID: 2671

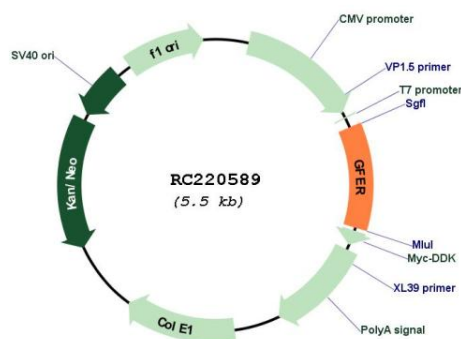
UniProt ID: [P55789](#)

Cytogenetics: 16p13.3

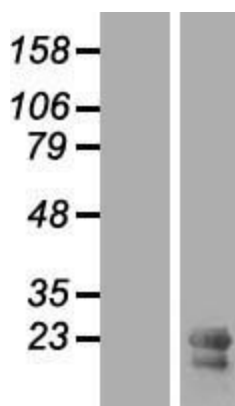
MW: 23.3 kDa

Gene Summary: The hepatotrophic factor designated augments liver regeneration (ALR) is thought to be one of the factors responsible for the extraordinary regenerative capacity of mammalian liver. It has also been called hepatic regenerative stimulation substance (HSS). The gene resides on chromosome 16 in the interval containing the locus for polycystic kidney disease (PKD1). The putative gene product is 42% similar to the scERV1 protein of yeast. The yeast scERV1 gene had been found to be essential for oxidative phosphorylation, the maintenance of mitochondrial genomes, and the cell division cycle. The human gene is both the structural and functional homolog of the yeast scERV1 gene. [provided by RefSeq, Jul 2008]

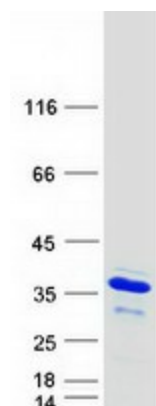
Product images:



Circular map for RC220589



Western blot validation of overexpression lysate (Cat# [LY417415]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220589 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GFER protein (Cat# [TP320589]). The protein was produced from HEK293T cells transfected with GFER cDNA clone (Cat# RC220589) using MegaTran 2.0 (Cat# [TT210002]).