

Product datasheet for **RC206542**

ALS (IGFALS) (NM_004970) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ALS (IGFALS) (NM_004970) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ALS
Synonyms:	ACLSL; ALS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC206542 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGCCCTGAGGAAAGGAGGCCTGGCCCTGGCGTGTCTGTCTGTCTCTGGGTGGCACTGGGCCCCCGCA
 GCCTGGAGGGAGCAGACCCCGAACGCCGGGGGAAGCCGAGGGCCAGCGTGCCTGGCCGCGCTGTGTCTG
 CAGCTACGATGACGACGCGGATGAGCTCAGCGTCTTCTGCAGCTCCAGGAACCTCACGCGCTGCCTGAT
 GGAGTCCCGGGCGCACCAAGCCCTGTGGCTGGACGGCAACAACCTCTCGTCCGTCCTCCCGGCGAGCCT
 TCCAGAACCTCTCAGCCTGGGCTTCTCAACCTGCAGGGCGGCCAGCTGGGCGAGCTGGAGCCACAGGC
 GCTGTGGGCTAGAGAACCTGTGCCACCTGCACCTGGAGCGGAACCAGCTGCGCAGCCTGGCACTCGGC
 ACGTTTGCACACGCCCCGCGTGGCTCGCTCGGCTCAGCAACAACCGTCTGAGCAGGCTGGAGGACG
 GGCTCTTCGAGGGCCTCGGCAGCCTCTGGACCTCAACCTCGGCTGGAATAGCCTGGCGGTCTCCCGA
 TGCGGCGTTCGCGGCCCTGGGCGAGCTGGTGTGGCGGGCAACAGGCTGGCCTACCTGCAG
 CCCGCGCTCTTACGCGGCTGGCCGAGCTCCGGGAGCTGGACCTGAGCAGGAACGCGCTGCGGGCCATCA
 AGGCAACGTTCTGTCAGCTGCCCGGCTCCAGAACTCTACCTGGACCGCAACCTCATCGTGCCT
 GGCCCCGGGCGCCTTCTGGGCTGAAGGCGCTGCGATGGCTGGACCTGTCCACAACCGCTGGCTGGC
 CTCTGGAGGACAGTTCCTCCGCTGTGCTGGGCTGCGTGTGCTGCGGCTGTCCACAACGCCATCGCCA
 GCCTGCGGCCCGCACCTTCAAGGACCTGCACTTCTGGAGGAGCTGCAGCTGGGCCACAACCGCATCCG
 GCAGCTGGCTGAGCGCAGCTTTGAGGGCCTGGGCGAGCTTGGGCTCACGCTAGACCACAACCGCTC
 CAGGAGGTCAAGCGGGCGCTTCTCGGCTCACCAACATGGCGGTATGAACCTCTCTGGAACTGTC
 TCCGGAACCTTCCGGAGCAGGTGTTCCGGGGCTGGGCAAGCTGCACAGCCTGCACCTGGAGGAGCTG
 CCTGGGACGCATCCGCCCGCACACCTTACCGGCTCTCGGGGCTCCGCGACTTCTCAAGGACAAC
 GGCTCGTGGGATTGAGGAGCAGACCTGTGGGGCTGGCGGAGCTGCTGGAGCTCGACCTGACCTCCA
 ACCAGCTCACGCACCTGCCCCACCGCTTCCAGGGCTGGGCAAGCTGGAGTACCTGCTGCTCTCCCG
 CAACCGCTGGCAGAGCTGCCGGCGGACGCCCTGGGCCCTGCAGCGGCTTCTGGCTGGAGCTCTCG
 CACAACCGCTGGAGGATTGCCAACAGCCTTGGCACCCTGGGCGGCTGCGCTACCTCAGCCTCA
 GGAACAACCTGCGGACCTTACGCGCGAGCCCCGGGCTGGAGCGCTGTGGCTGGAGGTAACCC
 CTGGGACTGTGGCTGCCCTCAAGGCGCTGCGGACTTCGCCCTGCAGAACCCAGTGTGTGCCCGC
 TTCGTCAGGCCATCTGTGAGGGGACGATTGCCAGCCCGCGGTACACCTACAACAACATCACCTGTG
 CCAGCCCGCCGAGGTCGTGGGCTCGACTGCGGGACCTCAGCGAGGCCACTTGTCTCCCTGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC206542 protein sequence
 Red=Cloning site Green=Tags(s)

MALRKGLALALLLSWVALGPRSLEGADPGTPEAEGPACPAACVCSYDDADELSVFCSSRNLTRLPD
 GVPGGTQALWLDGNNLSSVPPAAFQNLSSLGFLNLQGGQLGSLEPQALLGLENLCHLHLERNQLRSLALG
 TFAHTPALASLGLSNNRSLREDFEGLGSLWDLNLGWNSLAVLPDAAFRGLGSLRELVLAGNRLAYLQ
 PALFSGLAELRELDL SRNALRAIKANVFVQLPRLQKLYLDRNLI AAVAPGAFGLKALRWLDL SHNRVAG
 LLEDTFPGLLGLRVLRLSHNAIASLRPRTFKDLHFL EELQLGHNRI RQLAERSFEGLGQLEVL TLDHNQL
 QEVKAGAFGLTNMAVMNLSGNCLRNLPEQVFRGLGKLHSLHLEGSCLGRIRPHTFTGLSGLRRLFLKDN
 GLVGIIEQSLWGLAELELDLTSNQLTHLPHRLFQGLGKLEYLLSRNRLAELPADALGPLQRAFWDVVS
 HNRLEALPNSLLAPLGRRLYLRLRNNSLRFTTPQPPGLERLWLEGNPWDCGCPKALRDFALQNP SAVPR
 FVQAICEGDDCQPPAYTYNNITCASPEVVGLDLRDLSEAHFAPC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6197_d02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004970

ORF Size: 1815 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_004970.3](#)

RefSeq Size: 2168 bp

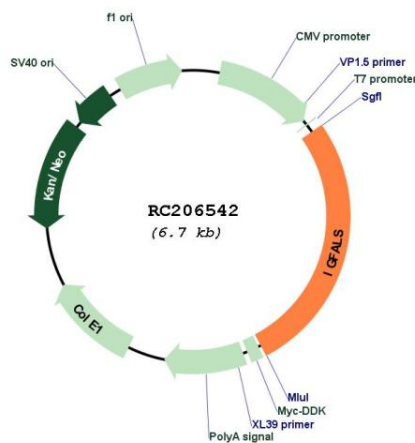
RefSeq ORF: 1818 bp

Locus ID: 3483

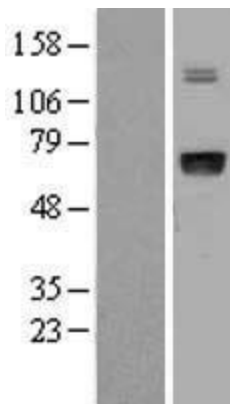
UniProt ID: [P35858](#)
Cytogenetics: 16p13.3
Protein Families: Druggable Genome, Secreted Protein
MW: 66.1 kDa

Gene Summary: The protein encoded by this gene is a serum protein that binds insulin-like growth factors, increasing their half-life and their vascular localization. Production of the encoded protein, which contains twenty leucine-rich repeats, is stimulated by growth hormone. Defects in this gene are a cause of acid-labile subunit deficiency, which manifests itself in a delayed and slow puberty. Three transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Mar 2009]

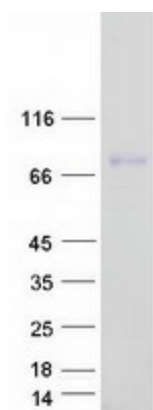
Product images:



Circular map for RC206542



Western blot validation of overexpression lysate (Cat# [LY401546]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206542 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified IGFALS protein (Cat# [TP306542]). The protein was produced from HEK293T cells transfected with IGFALS cDNA clone (Cat# RC206542) using MegaTran 2.0 (Cat# [TT210002]).