

## Product datasheet for **SC325876**

### ALS2 (NM\_001135745) Human Untagged Clone

#### Product data:

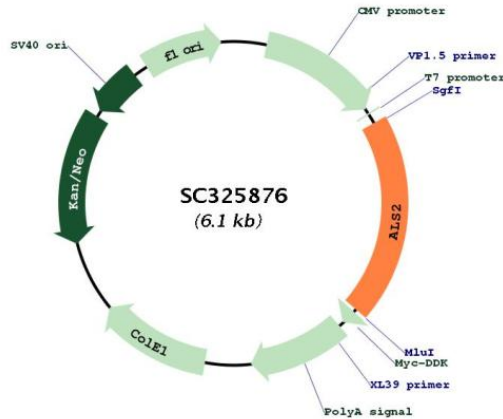
Product Type:	Expression Plasmids
Product Name:	ALS2 (NM_001135745) Human Untagged Clone
Tag:	Tag Free
Symbol:	ALS2
Synonyms:	ALS2CR6; ALSJ; IAHSP; PLSJ
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC325876 representing NM_001135745. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCC GCGATCGCC
ATGGACTCAAAGAAGAGAAGCTCAACAGAGGCAGAAGGATCCAAGGAAAGAGGCCTGGTCCATATCTGG
CAGGCAGGATCCTTTCCATAACACCAGAGAGATTGCCAGGCTGGGGAGGAAAGACTGTTTTGCAGGCA
GCCCTCGGAGTGAACATGGAGTTCTTCTGACTGAAGATGGTGAGGTCTACAGCTTTGGGACTCTTCCC
TGGAGAAGTGGACCAGTGGAGATTTGTCCAAGTAGCCCCATTCTAGAAAATGCCCTGGTTGGCAATAT
GTTATTACTGTGGCAACAGGAAGCTTCCATAGTGGAGCAGTGACAGACAATGGTGTGCGGTACATGTGG
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ATTGCTGATTCTGAGGCCAGCCCTTTGTTAGCAGTCAGGATTTTACAGTTGGCGTGTGGCAGGAGCAC
ACTCTGGCATTGTCAATAAGCAGAGAGATTTGGGCATGGGGTACCGGTTGTGAGTTGGGTCTCATTACC
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TGTGGTGTCTTCCACAGCTTAGCCCTTGTACAATGCCTCCCTTCCAGGATCTGAAGCCAGTCCCAGAA
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AGTCATTGTTGCCATTAGGTGTGACTGACAGAATCTCAGGCAGAAAACCATGCCAGCACTGCTCTC
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TCTGTTGCTACTGAACTGAATGACGTAAGTGCTCAGATCACAAGCAGCGATGCCATGCTCCTTCAACAA
AATGTCATGGGAACAACGAAATTTCTCTGCCAGAAACATACCATCATACCCTGACACCCAAGCAGTC
AATGAATACCTACGAAAACGTGTCAGATCATTAGTAAGAGAGGACTCAGAGCATGGTGAAAAGCCAGTG
CCATCTCAGGTACCTGCTCAATTTATAAAATAAAAGTGTGCTAGAGTTGAACTGTATGGGCTTTTCT
TTAGAACTTTAAAATGA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
```

Restriction Sites: Sgfl-MluI



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**Plasmid Map:**


**ACCN:** NM\_001135745

**Insert Size:** 1191 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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\\_001135745.1](#)

**RefSeq Size:** 2908 bp

**RefSeq ORF:** 1191 bp

**Locus ID:** 57679

**UniProt ID:** [Q96Q42](#)

**Cytogenetics:** 2q33.1

<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Amyotrophic lateral sclerosis (ALS)
<b>MW:</b>	42.6 kDa
<b>Gene Summary:</b>	<p>The protein encoded by this gene contains an ATS1/RCC1-like domain, a RhoGEF domain, and a vacuolar protein sorting 9 (VPS9) domain, all of which are guanine-nucleotide exchange factors that activate members of the Ras superfamily of GTPases. The protein functions as a guanine nucleotide exchange factor for the small GTPase RAB5. The protein localizes with RAB5 on early endosomal compartments, and functions as a modulator for endosomal dynamics. Mutations in this gene result in several forms of juvenile lateral sclerosis and infantile-onset ascending spastic paralysis. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2008]</p> <p>Transcript Variant: This variant (2) uses an internal polyA site resulting in a substantially shorter transcript with a unique 3' coding region, compared to variant 1. The encoded isoform (2), also known as the short form, is substantially shorter and has a unique C-terminus, compared to isoform 1.</p>