

Product datasheet for **SC308723**

ALS2 (NM_020919) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ALS2 (NM_020919) 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:	>SC308723 representing NM_020919. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites:	Sgfl-Mlul
ACCN:	NM_020919
Insert Size:	4974 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 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:	<ol style="list-style-type: none"> 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_020919.2
RefSeq Size:	6470 bp
RefSeq ORF:	4974 bp
Locus ID:	57679
UniProt ID:	Q96Q42
Cytogenetics:	2q33.1
Domains:	RCC1, VPS9, MORN
Protein Families:	Druggable Genome
Protein Pathways:	Amyotrophic lateral sclerosis (ALS)
MW:	183.6 kDa

Gene Summary:

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]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1), also known as the LF or long form.