

## Product datasheet for MR219913

### Als2 (NM\_001159948) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Als2 (NM_001159948) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Als2
Synonyms:	3222402C23Rik; 9430073A21Rik; Als2cr6; Alsin; mKIAA1563
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>MR219913 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGGACTCAAAGAAGAAAAGCTCAACAGAGGCAGAAGGATCCAAAGAAAGAGGCCTAGTCCATGTCTGGC  
AGGCAGGATCCTTTCTCTAACACCAGAGAGGTTGCCAGGCTGGGGTGGAAAGACAGTTCTTCAGGCAGC  
CCTTGGTGTGAGGCATGGAGTTCTCTGACTGAAGATGGTGGGTTCTACAGCTTTGGGACTCTTCCCTGG  
AAAAGTGAATCAGCAGAAATTTGTCCAAGCAGCCCCCTCTAGAAAGTGCCTGGTTGGGCATCATGTTA  
TTACTGTGGCAACAGGGAGCTTCCACAGTGGAGCAGTGACAGAGAGCGGGGTGGTGTACATGTGGGGAGA  
GAATGCTGCCGGCAGTGTGCGGTAGCTAACAGCAGTATGTGCCGGAGCCGAGTCTGTGAGCATTCT  
GACTCGGAGACCAGCCGTCATTAGCAGTTAGGATTCTGCAATTGGCATGTGGCGAGGAACACACTGG  
CATTGTCACTCAGCAGAGAGATCTGGGCATGGGCACCCGGCTGTGAGTGGGCTCATCACCACCCTTT  
CCCAGTGACAAAGCCACAGAAGGTGGAACACCTTGCTGGACGCGTGGTGTCCAGGTGGCCTGCGGTGCA  
TTCCACAGCCTTGCACTTGTGCAGTGCCTCCCTCCTCAGGATCTGAAGCCAGTCCAGAGAGATGCAATC  
AGTGCAGCCAGCTGCTCATCACCATGACAGACAAAGAGGACCATGTGATAATATCGGACAGCCATTGCTG  
CCCTTTAGGTGTGACATTGTCCGAGTCTCAAGCAGAAAAGCATGCCAGCCCTGCTCCAGCCCTCACCCA  
GAGGCACTGGATGAGCAGGGAGAGGTGTTTGAAGAACCGTGGTGAAGCTGAACATGGAAGCA  
GTCAGACCACAAGTGGCAGTGCCATTTCCACCCAGCAGAACGTCGTGGGAACAGCTGAAGTGTCTTCTGC  
CAGAACAGCTCCGTCATACCCAGACACCATGCGGTAAGTGCATACCTGCAGAAGCTGTGAGCAGATTG  
ATGAGGGAGAACCATGAGCCTGGAGAAAAGCCACCCAGGTCAGCCTTGTGAGAAGAAGCAGTTCTCTG  
ATCTTCACAGTCCACCAACCACAAGCACCTCAGCCCTCAACAGCTTGGTGGTCTCCTGTGCATCTGCTGT  
TGGTGTCAGAGTGGCTGCCACCTATGAAGCTGGGGCTTGTCTCTCAAGAAAGTTATGAACCTTTACAGC  
ACTGCCCCCTGCGAGACGGCAGCTCAGTCGGGAGTGCCTCCACAGGCCAGAAAGTCTGAAAGATCTCC  
GAGAAGAGCAGGTGAAACAGGAGTCACTGCAAGGGAAGAAAAGCTCAAGTCTCATGGACATCAGAGAGGA  
GGAGTTGGAGGGAGGGAGTCAAGACTCTCCCTCCCAGGGTGTGTGCGAAGTTTCCCCAGGCTCTTA  
AGGAAGGCTGCGAGGGTGAAGAACTCGGACAGTGTTTCTGACTCCACATACAGTGGAGAAGCAGATGCC



[View online »](#)

TTCTGCCTTCCCTGAGGACAGAGGTGTGGACCTGGGGAAAGGCAAGGAAGGGCAGCTAGGGCACGGCGA  
 CGTCCTGCCAGGCTTACGCCGTTGTGTGTCAAGTGTCTGGATGGTAAAGAGGTAATCCACCTGGAGGCG  
 GGCGGCTCCCCTCCCTCGCACTCACTGCGAAATCTCAGGTTTACTCATGGGGCAGTAATACCTTTGGTC  
 AGCTTGGGCATTCTGAGTTTCCAACAACGGTTCCTCGACTCTCAAAGGTTAGCAGTAAAAATGGAGTCTG  
 GAGTGTAGCTGCAGGCCAAGATTATTCCTTGTTTTTAGTGGACACGGAAGACTCCAGCCTGGGTGTAT  
 TACAGTGGCCGACAGGACCGTGCAGAAGGTGATACCCTGCCAGAGAATCCAGTGGTACAAGACTCCAG  
 TACTTCTCCTGTAGTAAGCTTGGATACATAAGCAGAGTAACAGCAGGAAAAGATAGCTATCTAGCCTT  
 GGTGGATAAGAACATCATGGGATACATCGCCAGTCTCCATGAGTTGGCTTCTACAGAAAAGACGGTTTTAC  
 TCAAAACTGAGCGAAAATCAAATCACAGATACTTAGGCCTCTTCTCAGTTTAGAAAATTTGGGCACAGTGA  
 CCACTGTCCAGCTGTTGCAGGAAGTTGCCAGCCGGTTCAGCAAGTTGTGTACCTCATTGGGCAGCATGG  
 AGCCTCACTAAGCAGCTACCTACAGGGCATGAAGGAAGCCAGCAGCCTGGTCATCATGAAGCACTCAAGT  
 CTTTTCTGGACAGCTACACAGAGTACTGCACATCAGTTTCAAATTTCTGGTTATGGGAGGATTCCAGC  
 TTCTTGCTAAGCCTGCCATTGATTTCTAAATAAAAACCAAGAAGTCTTGAAGATTTGTCAGAAGTGAA  
 TGATGAGAACACTCAGTTGATGGAAATCCTGAACATGCTGTTTTCTTGCCAATCAGACGACTTCATAAT  
 TATGCAAAAGTTTTGCTAAAGCTTGCCACTTGCTTTGAAGTGACATCTCCAGAGTATCAAAGCTGCAGG  
 ATTCCAGTTCTTGCTATGAGTCTTGTCTCCATCTTGCAAGAAGAGGAAGGAAGCAGAGTACACACT  
 GAGCTTCTGGAAGACCTTCTGGGAAAATGACGGATTCTTGAGGAAGCCAGAGCGCCGGCTGTGTGT  
 GAGAGCAGTAACCGAGCCCTCTCCCTGCAGCATGCCGGCAGGTTTTCTGTGAATTGGTTCATTCTCTTCA  
 ATGATGCCCTGGTCCATGCTCAGTTCTACACACCACGTGTTCCCTTTGGCCACACTCTGGGCAGAGCC  
 ACTTTCTGAAGAAGCTGGTAGCGTGAATGGCTTAAAGATAACTACACCTGAAGAACAATTCACACTCATT  
 TCTTCAACACCCAGGAAAAGACCAAGTGGCTTCGGGCTATCAGCCAAGCTGTGGATCAGGCTTTGAGGG  
 GGACGTCGGATTTCCACTTTACGGAGCGGCAGCAGTGTTCAGAGACAGGAACCCACTCTCAAAGAAG  
 TGCCAAATACACTTTCTACAAGGATACTCGCCTAAAGGATGCCACTTACGATGGGCGCTGGCTTTCCAGG  
 AAGCCTCATGGCAGGGGTGTTCTGAAGTGGCCTGATGGAAAGATGTAAGTCTGGCATGTTCAAGAAATGGCT  
 TGGAAAGATGGATATGGTGAATACAGAATCCCTAACAAGGCCCTGAACAAAGAAGACCATTATGTAGGCCA  
 TTGAAAGAGGGGAAAATGTGTGGGCAAGGAGTCTACAGCTATGCCTCTGGTGAAGTGTGTAAGGCTGC  
 TTTCAAGATAACATGCGCCATGGGCATGGTCTGCTCCGGAGTGGAAAAGTACTTCTTCTCTCTAGCA  
 TGTTTATTGGCCAGTGGTAATGGATAAGAAAGCAGGATATGGCGTCTTTGATGATATCACCAGGGGAGA  
 AAAGTACATGGGAATGTGGCAGGATGATGTGTGCCAAGGAATGGGGTAGTAGTACCCAGTTTGGGTTA  
 TACTACGAAGGCAACTCCACCTGAATAAGATGATGGGAAATGGGTTTTGCTTCTGAAGATGATACCA  
 TCTATGAAGGAGATTTTCCGATGACTGGACACTTGTGAAAGGGAACGCTGACTATGCCACATGGAGA  
 TTATATTGAAGGTTATTTTAGTGAGAAATGGGGATCTGGGATAAAAATCACTGGGACCTACTTCAAACCT  
 AGCCTGTATGAGAGCGATAAGGACAAGCCAAAGCCTTCAGGAAGCTGGGGAACCTGGCCGTGGCAGCAG  
 ACGAGAAAATGGAGAGCAGTGTGTAAGAATGCTGGCGCCAGCTGGGCTGTGAGAGCCCAGGCCAAGGGGA  
 GGTTTGGAAAGCATGGGATAATATTGCTGTGGCCTTGACCACGAACCGTCCGCAGCATAAAGACAGTCCA  
 GAAATACTAAGCCGCTCTCAGACTCAGACCCTGGAGAGTTGGAGTACATTTCCACAGCATTGGCGCCT  
 TCTCTGTGGAGAAAATATGATGACATCAAGAAGTATTTAATAAAGGCCTGTGATACTCCTCTGCACCCACT  
 GGGCAGGCTTGTGGAGACCCTGGTTGCGGTGTATAGAATGACATATGTGGGTGTAGGGGCCAACCGCCGG  
 TTAGTGCAGGAAGCTGTGAAGGAGATTAATCTTATCTCAAGAGGATTTCCAGCTTGTGAGGTTCTTGT  
 TTCCTGAGCTTCTGAGGAGGGCAGCAATTCCTCTTCTGCTCCTCTGCCACTGGAAGGAGATCCTT  
 CTGTAAGTGGAAAATCGGATTCCAGATCCGAGTACCAGAACAGGTTATGATGTAACAAGTTCTGGCTTA  
 CTGCTTCCGGTGTGCTGCCACGGCTCTACCCACCTCTCTTATGCTCTATGCCCTGGATAATGACCCGAG  
 AGGAAGACATTTACTGGGAATGTGTGCTTCGACTAAACAAGCAGCCAGATATTGCTCTCTGGGCTTCT  
 TGGAGTACAGAAAAATCTGGCCAGCCACCTTGTCAATCCTTGAGAGAGTAAAAAGGTGTGTCAACC  
 ACAAAGGATGCTTGTCTTGCATCTGCAGTAGAATGCCTGCAGCAGATCAGCACAACTTTACTCCATCAG  
 ACAAGCTTAAAGTGATCCAGCAGACCTTGAAGAGATCTCCAGAGTGTCTTGCATCGTGCAGGAGGA  
 CTTCTCTGGTCCATGGATGACTTGTTCCTCCGCTTCTTATACGTGGTGTGCGGGCCAGGATTCGGAAC  
 TTGGGCTCTGAAGTTCACCTCATTGAGGATCTGATGGACCCCTTCTCCAGCATGGGGAACAAGGCATCA  
 TGTTACCACCTTGAAGGCTGTACTTCCAGATTCAGCGGGAGAAGCTTAAC

AGCGGACCGACGCGTACGCGCCGCTCGAGCAGAAAATCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
 TGGATTACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

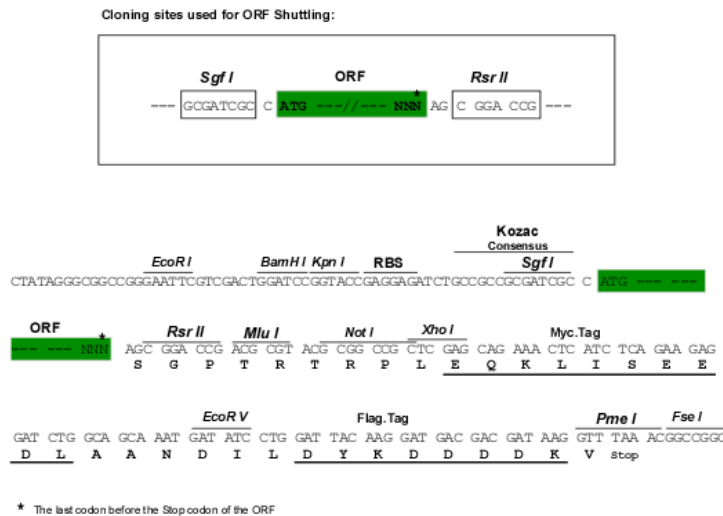
>MR219913 protein sequence  
 Red=Cloning site Green=Tags(s)

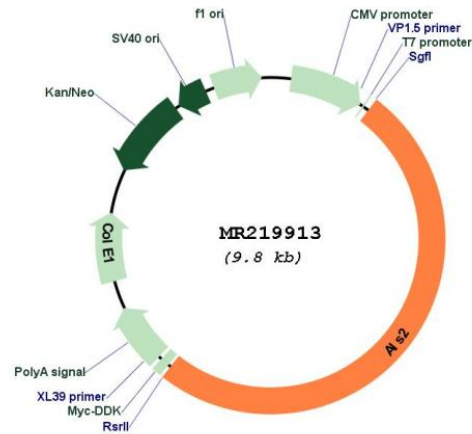
MDSKKKSSTEAEGSKERGLVHVWQAGSFLTPERLPGWGGKTVLQAALGVRHGVLLEDGEVVSFGTLPW  
 KSESAEICPSSPLESALVGHVITVATGSFHSAGVTESGVVYMWGENAAGQCAVANQQYVPEPSPVIS  
 DSETSPSLAVRILQLACGEEHTLALSREIWAAGTGCQLGLITTFPVTKPKVEHLAGRVLQVACGA  
 FHSALVQCLPPQDLKPVPERCNCQCSQLLITMTDKEDHVIISDSHCCPLGVTLSESQAETHASPA  
 EALDEQGEVFENTVVEAELNMGSSQTTSGSAISTQQNVVGTAEVSSARTAPSYPDTHAVTAYLQKLS  
 MRENHEPGEKPPQVQPLVEEAVPDLHSPPTTSTALNSLVVSCASAVGVRVAATYEAGALSLLKVMNFYS  
 TAPCETAAQSGSASTGPESLKDRLREEQVKQESLQGKSSSLMDIREEELEGGSRRLSLPGLLSQVSPRLL  
 RKAARVKTTRTVLTPYSGEADALLPSLRTEVWTWGGKGEQGLGHGDVLPRLQPLCVKCLDGKEVIHLEA  
 GGSHSLALTAQSQVYWSGNTFGQLGHSEFPTVPRLSKVSENGVWSVAAGQDYSLFLVDEDFQPLGY  
 YSGRQDRAEGDTLPENPSGKTPVLLSCSKLGYISRVTAGKDSYLALVDKNIMGYIASLHELASTERRFY  
 SKLSEIKSQILRPLLSLENLGTVTQVLLQEVASRFKLCYLIGQHGASLSSYLQGMKEASSLVMKHSS  
 LFLDSYTEYCTSVSNFLVMGGFQLLAKPAIDFLNKNQELLQDLSEVNDENTQLMEILNMLFFLP  
 YAKVLLKLATCFEVTSPYQKLQDSSSCYELALHLGKKRKEAETLSFWKTFPGKMTDSLKRPERRLLC  
 ESSNRALSQHAGRFVSNWFILFNDALVHAQFSTHHVFLATLWAEPLSEEAGSVNGLKITTPEEQFTLI  
 SSTPQEKTKWLRASQAVDQALRGTSDFPYGGSSVQRQEPPIRSRASYTFYKDRKDATYDGRWLSG  
 KPHGRGVLKWPDKMYSGMFRNGLEDGYGEYRIPNKALNKEDHYVGHWKEGKMCQGQVYVSASGEVFE  
 FQDNMRHGHGLLRSGKLTSSSPSMFIGQVWMDKKAGYGVFDDITRGEKYMGMWQDDVCQNGVVTQFGL  
 YYEGNFHLNKMNGVLLSEDDTIYEGEFSDDWTLSGKGTLTPHGDYIEGYFSGEWGSGIKITGT  
 SLYESDKDKPKAFRKLGNLAVAADKWRVFECCWRQLGCESPGQGEVWKAWDNI AVALTTNRRQHKD  
 SP EILSRSTQTLSELEYIPQHIGAFSVEKYDDIKKYLKACDTPHLPLGRLVETLVAVYRMTYVGVG  
 ANRR LLQEAVKEIKSYLKRIFQLVRFLEPEEGSTIPLSAPLPTGRRSFCTGKSDSRSESP  
 EPGYVVTSSGL LLPVLLPRLYPPFLMLYALDNDREEDIYWEVLRNLKQPDIALGLFLGVQKFW  
 PATLSILGESKVLST TKDACFASAVECLQQISTTFTPSDKLKIQQTFEEISQSVLASLQEDFL  
 WSMDDLFPVFLYVVLRARIRN LGSEVHLIEDLMDPFLQHGEQGIMFTTLKACYFQIQREKLN

SGPTRRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-RsrII

**Cloning Scheme:**


**Plasmid Map:**


**ACCN:** NM\_001159948

**ORF Size:** 4953 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\\_001159948.2](#), [NP\\_001153420.2](#)

**RefSeq Size:** 6681 bp

**RefSeq ORF:** 4956 bp

Locus ID: 74018  
UniProt ID: [Q920R0](#)  
Cytogenetics: 1 C1.3  
MW: 182.6 kDa  
Gene Summary: May act as a GTPase regulator. Controls survival and growth of spinal motoneurons.  
[UniProtKB/Swiss-Prot Function]