

Product datasheet for **MR230991**

Add2 (NM_001271858) Mouse Tagged ORF Clone

Product data:

| | |
|--------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | Add2 (NM_001271858) Mouse Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | Add2 |
| Synonyms: | 2900072M03Rik; add97 |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| Cell Selection: | Neomycin |



[View online »](#)

ORF Nucleotide
Sequence:

>MR230991 representing NM_001271858
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGAGCGAGGACACGGTCCCGAGGCGGCCTCCCGCCACCCTCTCAGGGGCAGCACTACTTTGACCGGT
TCTCTGAAGATGATCCTGAGTACTTGCGACTTCGCAACCGTGCAGCTGACCTGCGACAGGACTTCAACTT
GATGGAGCAGAAGAAGAGGGTCACCATGATCCTGCAGAGCCCTTCTTTCAGGGAGGAGCTGGAAGGCCTC
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TGGCCAGCACCTCCACGCAGTCTTCCAGCTTCTCCATGAACCTTCCATGATGACACCCATCAACGA
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AGTGAACATTCTGGGAGAGGTGGTGGAGAAGGGCAGCAGTTGCTTCCCGTGGACACCACGGGCTTCAGT
CTGCACTCAGCCATCTATGCCGCCAGGCCGACGTGCGGTGTGCCATCCACCTGCACACGCTGCCACCG
CAGCGGTGTCAGCTATGAAGTGGCGCTCCTGCCGGTCTCCCATAAATGCCTGCTGGTGGGGACATGGC
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CAGCACGCCCAGAAGCAGCAGAAGGAAAAGACCCGCTGGCTTAACACTCCCAACCTACCTGCGGGTGA
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AATCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR230991 representing NM_001271858
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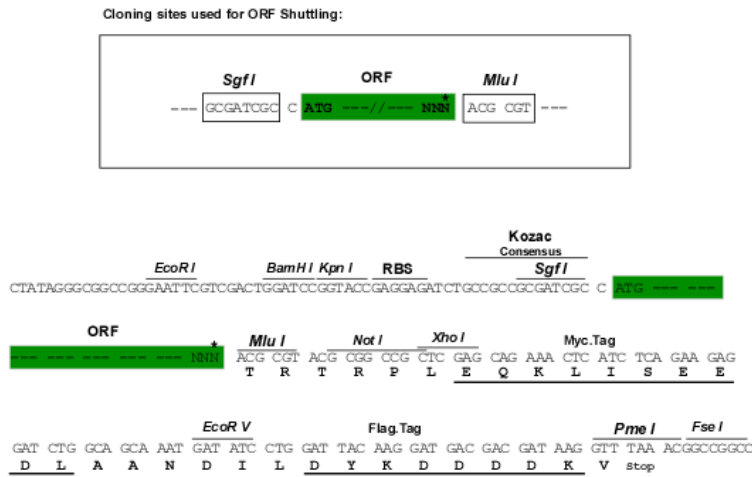
MSEDTVPEAASPPPSQGQHYFDRFSEDDPEYLRLNRRAADLRQDFNLMEQKKRVTMILQSPSFREELEGL
 IQEQMKGNNSSNIWALRQIADFMASHTSHAVFPASSMNF SMMTPINDLHTADSLNLAKGERLMRCKISSV
 YRLLDLYGWAQLSDTYVTLRVSKEQDHFLLISPKGVSCSEVTASSLIKVNILGEVVEKGSSCFVDTTGFS
 LHSAIYAARPDVRCIAIHLHTPATAAVSAMKCGLLPVSHNALLVGDMAYYDFNGEMEQEADRINLQKCLGP
 TCKILVLRNHGMVALGDTVVEAFYKVFHLQAACEVQVSALSSAGGTENILLEQEKHRPHEVGSVQWAGS
 TFGPMQKSRLGEHEFEALMRMLDNLGYRTGYTYRHPFVQEKTKHKSEVEIPATVTAFFVFEEDGVPVPALR
 QHAQKQKQEKTRWLNTPNTYL RVNVADEVQRNMGSPRPKTTWMKADEVKSSSGMPIRIENPNQFVPLYT
 DPQEVLDMRNKIREQNRQDIKSAGPQSLLASVIAEKSRSPSTESQLMSKGDADTKDESEETVPNPFSQL
 TDQLEEEYKKEVERKKLEQEQEKEKDIAEKPGSPVKSTPASPVSQSPKAGTKSPAVSPSKTSEDTKKTE
 VSEANTEPEPVKPEGLV VNGKEEESPVEEALSKGLGQMTTNAADTDGDSYKDKTESVTSGPLSPEGSPSKS
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TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

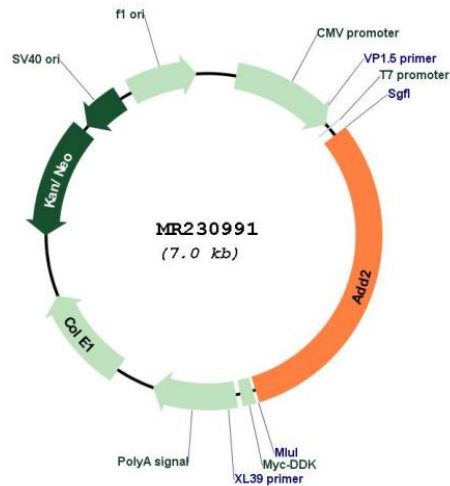
Sgfl-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001271858

ORF Size: 2175 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_001271858.1](#), [NP_001258787.1](#)

RefSeq Size: 8220 bp

RefSeq ORF: 2178 bp

Locus ID: 11519

UniProt ID: [Q9QYB8](#)

Cytogenetics: 6 37.55 cM

MW: 81.1 kDa

Gene Summary: This gene encodes the beta subunit of the adducin family. Adducins, encoded by alpha, beta and gamma genes, are heteromeric proteins that crosslink actin filaments with spectrin at the cytoskeletal membrane. This protein, primarily found in the brain and hematopoietic cells, is regulated by phosphorylation and calmodulin interactions as it promotes spectrin assembly onto actin filaments, bundles actin and caps barbed ends of actin filaments. In mouse, deficiency of this gene can lead to mild hemolytic anemia and impaired synaptic plasticity. Mutations of this gene in mouse serve as a pathophysiological model for hereditary spherocytosis and hereditary elliptocytosis. Alternative splicing results in multiple transcript variants that encode different protein isoforms. [provided by RefSeq, Dec 2012]