

Product datasheet for **MG223395**

Add2 (NM_013458) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Add2 (NM_013458) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Add2
Synonyms:	2900072M03Rik; add97
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG223395 representing NM_013458
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGCGAGGACACGGTCCCGAGGCGGCCTCCCGCCACCCTCTCAGGGGCAGCACTACTTTGACCGGT
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 AATCC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

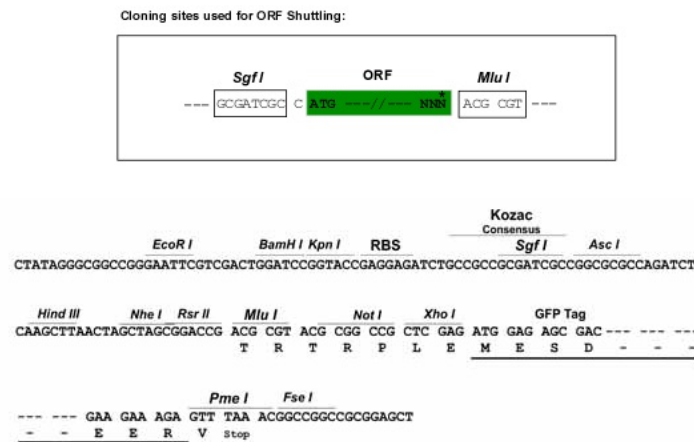
Protein Sequence: >MG223395 representing NM_013458
 Red=Cloning site Green=Tags(s)

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YRLLDLYGWAQLSDTYVTLRVSKEQDHFLLISPKGVSCSEVTASSLIKVNILGEVVEKGSSCFPVDTTGFS
LHSAIYAARPDVRC AIHLHTPATAAVSAMKCGLLPVSHNALLVGD MAYYDFNGEME QEADRINLQKCLGP
TCKILVLRNHGMVALGDTVEEAFYKVFHLQAACEVQVSALSSAGGTENLILLEQE KHRPHEVGSVQWAGS
TFGPMQKSRLGEHEFEALMRMLDNLGYRTGYTYRHPFVQEKT KHKSEVEIPATVTA FVFEEDGVPV PALR
QHAQKQKQEKTRWLNTPNTYL RVNVADEVQRNMGSPRPKTTW MKADEVEKSSSGMP IRIENPNQFV PLYT
DPQEVLD MRNKIREQNRQDIKSAGPQSLLASVIAEKSRSPSTESQLMSKGDADTKDESEETVPNPFSQL
TDQELEEKEVERKLEQE QEKEKDIA TEKPGSPVKSTPASP VQSPSKAGTKSPAVSPSKT SEDTKKTE
VSEANTEPEPVKPEGLV VNGKEE EPSVEEALSKGLQMTT NADTDGDSYKDKTESV TSGPLSPEGSPSKS
PSK KKKKFRTPSFLKSKKKK KEVES
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TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_013458

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_013458.5](#), [NP_038486.2](#)

RefSeq Size: 3119 bp

RefSeq ORF: 2178 bp

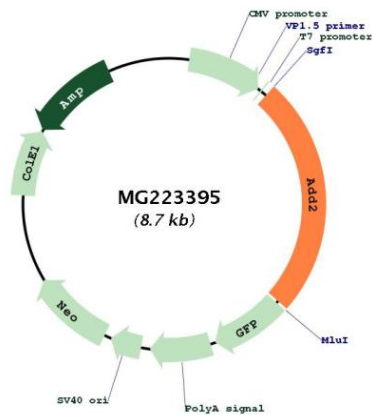
Locus ID: 11519

UniProt ID: [Q9QYB8](#)

Cytogenetics: 6 37.55 cM

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]

Product images:



Circular map for MG223395