

## Product datasheet for **MG208912**

### Add2 (BC053032) Mouse Tagged ORF Clone

#### Product data:

|                           |  |
|---------------------------|--|
| Product Type:             | Expression Plasmids                    |
| Product Name:             | Add2 (BC053032) 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)                 |



[View online »](#)

**ORF Nucleotide Sequence:**

>MG208912 representing BC053032  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGAGCGAGGACACGGTCCCGAGGCGGCCTCCCGCCACCCTCTCAGGGGCAGCACTACTTTGACCGGT  
 TCTCTGAAGATGATCCTGAGTACTTGCAGCTTCGCAACCGTGCAGCTGACCTGCGACAGGACTTCAACT  
 GATGGAGCAGAAGAAGAGGGTACCATGATCCTGCAGAGCCCTTCTTTCAGGGAGGAGCTGGAAGGCCTC  
 ATCCAGGAGCAAATGAAGAAGGGCAACAACTCCTCCAACATCTGGGCCCTCCGACAGATCGCGGACTTCA  
 TGGCCAGCACCTCCACGCAGTCTCCAGCTTCTCCATGAAGTCTCCATGATGACACCCATCAACGA  
 CCTCCACACTGCCGACTCCCTGAACCTGGCCAAGGGGAGAGGCTTATGCGGTGCAAGATCAGCAGCGTC  
 TACCGTCTCTGGACCTACGGCTGGGCGCAGCTCAGTGACACCTACGTACGCTGAGAGTGAGCAAGG  
 AGCAGGACCACTTCTGATCAGCCCAAGGGGTTTCTGCAGCGAGGTACAGCCTCCAGCCTGATTAA  
 AGTGAACATTCTGGGAGAGGTGGTGGAGAAGGGCAGCAGTTGCTTCCCGTGGACACCACGGGCTTCAGT  
 CTGCACTCAGCCATCTATGCCGCCAGGCCGACGTGCGGTGTGCCATCCACTGCACACGCTGCCACCG  
 CAGCGGTGTCAGCTATGAAGTGGCGCTCCTGCCGGTCTCCCATAAATGCCCTGCTGGTGGGGACATGGC  
 TACTATGACTTCAATGGGGAAATGGAGCAGGAAGCTGACCGAATCAACTGCAGAAGTGCTTGGACCC  
 ACCTGCAAGATTCTGGTCTAAGAAACCATGGCATGGTCGCCCTGGTGACACCGTGGAGGAAGCTTTCT  
 ACAAGGTCTTCCATCTGCAGGCTGCGTGTGAGGTACAGGTGTGGCTCTGTCCAGTGTGGGGGCACTGA  
 GAACCTCATCTCTTGGAGCAAGAGAACACCGGCCGACGAGGTGGGCTCTGTGCAGTGGGCCGCGCAGC  
 ACCTTCGGGCCCATGCAGAAGAGCCGGCTGGGAGAGCATGAATTTGAAGCCCTCATGAGGATGCTGGACA  
 ATTTAGGCTACAGAACAGGCTATACGTACCGCCACCCCTTTGTCCAAGAGAAAACCAACAAAAGTGA  
 AGTGGAGATCCCAGCCACAGTCACTGCCTTTGTGTTTGAAGAGGATGGAGTCCCAGTCCCCGCCCTGCGC  
 CAGCACGCCCAGAAGCAGCAGAAGGAAAAGACCCGCTGGCTTAACACTCCCAACCTACCTGCGGGTGA  
 ACGTGGCTGACGAGGTGCAGAGGAACATGGGCAGTCCCCGACAAAGACCACGTGGATGAAGGCTGATGA  
 AGTGGAAAAGTCCAGCAGCGGCATGCCATACGGATTGAAAACCAACCAATTTGTGCCTCTCTACACT  
 GACCCCGAGGAAGTTCTGGACATGAGGAACAAGATTCGAGAGCAAAACCGACAAGACATAAAGTCAGCCG  
 GGCTCAGTCTCAGCTCTGGCCAGTGCATCGCAGAGAAGAGCCGGAGTCCGGTACAGCAGAGACTGCC  
 CCCAACCGAAGGGGAAGTGTATCAGACTCCTGGGGCTGGGCAGGGGACCCCTGAGTCTCAGGCCCGCTC  
 ACCCA

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>MG208912 representing BC053032  
 Red=Cloning site Green=Tags(s)

MSEDTVPEAASPPPSQGHYFDRFSEDDPEYLRLNRNRAADLRQDFNLMEQKKRVTMILQSPSFREELEGL  
 IQEQMKKGNSSNIWALRQIADFMASHTAVFPASSMNF SMMTPINDLHTADSLNLA KGERLMRCKISSV  
 YRLLDLYGWAQLSDTYVTLRVSKEQDHFLISP KGVSCSEVTASSLIKVNILGEVVEKGS SFCVPVDTTGFS  
 LHS AIYAARP DVRC AIHLHTPATAAVSAMKCGLLPVSHNALLVGDMAYYDFNGEMEQEADRINLQKCLGP  
 TCKILVLRNHGMVALGDTVEEAFYKVFHLQAACEVQVSALSSAGGTENLILLEQE KHRPHEVGSVQWAGS  
 TFGPMQKSRLGEHEFEALMRMLDNLGYRTGYTYRHPFVQEKTKHKSEVEIPATVTAFVFEEDGVPV PALR  
 QHAQKQKQEKTRWLNTPNTYL RVNVADEVQRNMGSPRPKTTWMKADEVEKSSSGMP IRIENPNQFVPLYT  
 DPQEVLD MRNKIREQNRQDIKSAGPQSLLASVIAEKSRSPVQQRLLPPTGEVYQTPGAGQGTPESSGPL  
 TP

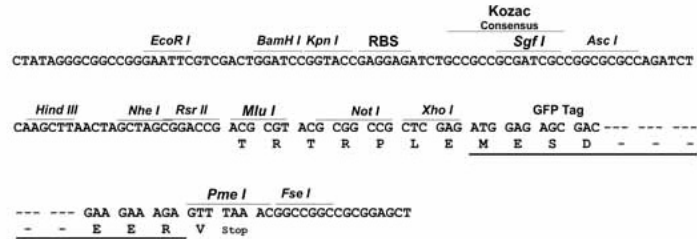
**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

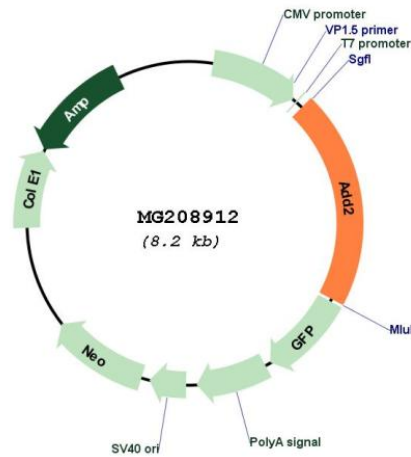
Sgfl-Mlul

## Cloning Scheme:

Cloning sites used for ORF Shutting:



## Plasmid Map:



ACCN: BC053032

ORF Size: 1688 bp

|                               |   |
|-------------------------------|---|
| <b>OTI Disclaimer:</b>        | 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. <a href="#">More info</a>  |
| <b>OTI Annotation:</b>        | This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.  |
| <b>Components:</b>            | 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).  |
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>   |
| <b>RefSeq:</b>                | <a href="#">BC053032</a> , <a href="#">AAH53032</a>   |
| <b>RefSeq Size:</b>           | 3431 bp   |
| <b>RefSeq ORF:</b>            | 1688 bp   |
| <b>Locus ID:</b>              | 11519   |
| <b>Cytogenetics:</b>          | 6 37.55 cM  |
| <b>Gene Summary:</b>          | 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] |