

## Product datasheet for **SC328937**

### Adducin 2 (ADD2) (NM\_001185055) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Adducin 2 (ADD2) (NM_001185055) Human Untagged Clone
Tag:	Tag Free
Symbol:	ADD2
Synonyms:	ADDB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

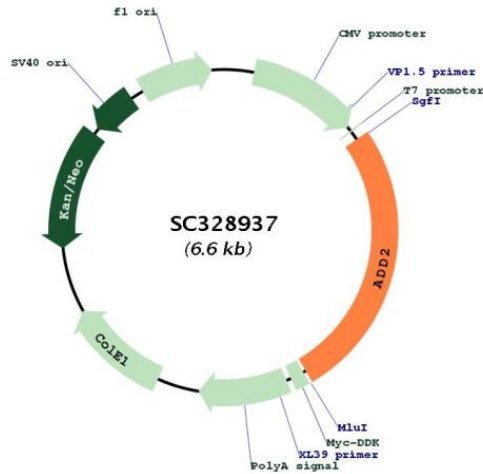


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Fully Sequenced ORF: >SC328937 representing NM\_001185055.  
Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
GCTCGTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
ATGCCCGCAGGAGAGTTCAGGAGCGAATTGCAAACCCACCGGGAAAATGAGCGAAGAGACGGTCCCC
GAGGCTGCCCTCGCCGCCCGCCCGCAGGGGCAGCCTTACTTTGACCGCTTCTCAGAGGACGACCCCGAG
TACATGCCCTTCGCAACCGGGCGCGGACCTGCGGCAGGACTTCAACCTGATGGAGCAGAAGAAGCGC
GTCACCATGATCCTGCAGAGTCCCTCTTTCAGGGAGGAGCTGGAAGGCCTCATCCAGGAGCAGATGAAG
AAGGGGAACAACCTCTCCAACATCTGGGCCCTGCGACAGATCGCGGACTTCATGGCCAGCACCTCCAC
GCAGTCTTCCGACATCTCCATGAATGTCTCCATGATGACGCCTATCAATGACCTCCACACAGCTGAC
TCCCTGAACCTGGCCAAAGGGGAGCGGCTCATGCGGTGCAAGATCAGCAGTGTCTACCGACTCCTGGAC
CTCTATGGCTGGCCAGCTGAGTGACACCTATGTCACGTTGAGAGTCAGCAAGGAGCAGGACCACTTC
CTGATCAGCCCTAAGGGAGTTTCTTGCAGTGAAGTCACAGCGTCCAGCCTGATCAAGGTGAACATCTG
GGAGAGTGGTGGAGAAGGGCAGCAGCTGCTTCCAGTGGACACCACAGGCTTCTGTCTGCACTCGGCC
ATCTATGCAGCGAGGCCGACGTGCGCTGCATCATCCACCTGCACACACCGGCCACAGCAGCGGTGTG
GCCATGAAGTGGGGCTCCTGCCTGTCTCCACAATGCCCTGCTGGTGGGGGACATGGCCTATTATGAC
TTCAATGGGGAAATGGAGCAGGAAGCCGATCGGATCAACCTGCAGAAAGTGCCTTGGACCCACCTGCAAG
ATCCTGGTGCTAAGAAACCATGGAGTGGTTGCTCTGGGTGACACGGTAGAGGAGGCATTTTACAAGATC
TTCCACCTGCAGGCTGCATGTGAGATACAGGTGTCGGCTCTGTCCAGTGCCGGGGAGTGGAGAACCTC
ATCCTCCTGGAGCAGGAGAAGCACCGGCCCATGAGGTGGGCTCCGTGCAGTGGGCCGGGAGCACCTTT
GGGCCTATGCAGAAGAGTCGGCTGGGGGAGCATGAGTTTGAGGCCCTCATGAGGATGCTGGACAACCTG
GGCTACAGAACAGGTTACAGTATCGCCACCCCTTTGTTCAAGAGAAAACCAAACAAAAAGTGGGTG
GAGATTCCAGCCACGGTCACAGCCTTCGTGTTTGAGGAGGACGGTGCCCGGTGCCCGCCCTGCGACAG
CATGCCCAGAAGCAGCAGAAGGAGAAGACCCGCTGGCTCAATACGCCAACACCTACCTGCGGGTCAAT
GTGCCGATGAGGTCCAGAGGAGCATGGGCAGCCCGACCCAAGACCACGTGGATGAAGGCTGACGAG
GTGGAGAAATCCAGCAGTGGCATGCCGATTGCGATCGAAAACCAAACCAATTTGTGCCTCTTATACT
GACCCCAAGAACTACTGGAGATGAGGAACAAGATTCGAGAACAACCAAGATGTGAAGTCAAGCAGCG
GGGCCTCAGTCCCAGCTCCTGGCAGCGTCATTGCCGAGAAGAGCCGAAGCCGGTAGAGCAGAGGCTG
CCCCTGACTGGCGGGAAACGTGTTGCTTCGGGGTCTTCTGTGCTGGGGCTGGGTTGCAGGACCCC
TGA
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
```

Restriction Sites: SgfI-MluI

**Plasmid Map:**


**ACCN:** NM\_001185055

**Insert Size:** 1728 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**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:**

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\\_001185055.1](#)

**RefSeq Size:** 3707 bp

**RefSeq ORF:** 1728 bp

**Locus ID:** 119

**UniProt ID:** [P35612](#)

**Cytogenetics:** 2p13.3

MW: 64.2 kDa

**Gene Summary:** Adducins are heteromeric proteins composed of different subunits referred to as adducin alpha, beta and gamma. The three subunits are encoded by distinct genes and belong to a family of membrane skeletal proteins involved in the assembly of spectrin-actin network in erythrocytes and at sites of cell-cell contact in epithelial tissues. While adducins alpha and gamma are ubiquitously expressed, the expression of adducin beta is restricted to brain and hematopoietic tissues. Adducin, originally purified from human erythrocytes, was found to be a heterodimer of adducins alpha and beta. Polymorphisms resulting in amino acid substitutions in these two subunits have been associated with the regulation of blood pressure in an animal model of hypertension. Heterodimers consisting of alpha and gamma subunits have also been described. Structurally, each subunit is comprised of two distinct domains. The amino-terminal region is protease resistant and globular in shape, while the carboxy-terminal region is protease sensitive. The latter contains multiple phosphorylation sites for protein kinase C, the binding site for calmodulin, and is required for association with spectrin and actin. Alternatively spliced transcript variants have been described. [provided by RefSeq, Jun 2010]

Transcript Variant: This variant (6) differs in the 5' UTR, lacks a portion of the 5' coding region, and initiates translation at an upstream start codon, compared to variant 1. This variant also differs in the 3' coding region and 3' UTR, compared to variant 1. The encoded isoform (f) has a distinct N-terminus and is shorter than isoform a.