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Product datasheet for SC127707

gamma Adducin (ADD3) (NM_019903) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	gamma Adducin (ADD3) (NM_019903) Human Untagged Clone
Tag:	Tag Free
Symbol:	ADD3
Synonyms:	ADDL; CPSQ3
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)
Cell Selection:	None

View online »

Fully Sequenced ORF:

>NCBI ORF sequence for NM_019903, the custom clone sequence may differ by one or more nucleotides

ATGAGCTCAGATGCCAGCCAAGGCGTGATTACCACTCCTCCTCCTCCCAGCATGCCTCACAAAGAGAGAT
ATTTTGACCGCATCAATGAAAATGACCCAGAATACATTAGGGAGAGGAACATGTCTCCTGATCTACGACA
AGACTTCAACATGATGGAGCAGAGGAAACGAGTTACTCAGATCCTGCAAAGTCCTGCCTTTCGGGAAGAC
TTGGAATGCCTTATTCAAGAACAGATGAAGAAAGGCCACAACCCAACTGGATTACTAGCATTACAGCAGA
TTGCAGATTACATCATGGCCAATTCTTTCTCGGGTTTTTCTTCACCTCCTCTCAGTCTTGGCATGGTCAC
ACCTATCAATGACCTTCCTGGTGCAGATACATCCTCATATGTGAAGGGAGAAAAACTTACTCGCTGTAAA
CTTGCCAGCCTGTACAGACTTGTAGACTTGTTTGGATGGGCACACCTGGCAAATACCTATATCTCAGTAA
GAATAAGTAAGGAGCAAGACCACATTATAATAATTCCCAGAGGCCTATCTTTTTCTGAAGCTACAGCCTC
CAATTTGGTGAAAGTCAATATAATAGGAGAAGTGGTTGACCAGGGAAGTACCAATTTGAAAATTGACCAT
ACAGGATTCAGTCCCCATGCTGCAATCTATTCAACACGTCCTGATGTTAAGTGTGTGATACACATCCATA
CCCTTGCAACAGCAGCTGTATCCTCCATGAAATGTGGGATCCTTCCAATTTCTCAAGAGTCTCTTCTTCT
GGGAGATGTTGCCTATTATGACTACCAAGGGTCACTTGAAGAACAGGAGGAGAGAATTCAACTGCAGAAG
GTTCTGGGACCAAGTTGTAAGGTGCTGGTACTCAGGAATCATGGTGTGGTTGCACTTGGAGAAACATTAG
AGGAGGCTTTTCATTATATTTTTAATGTGCAACTAGCCTGTGAGATTCAGGTGCAGGCCCTAGCAGGTGC
AGGTGGAGTAGACAATCTCCATGTACTGGACTTTCAGAAGTATAAAGCTTTCACTTACACTGTAGCAGCG
TCTGGTGGAGGAGGTGTGAATATGGGTTCCCATCAAAAATGGAAGGTTGGCGAAATTGAGTTTGAAGGGC
TTATGAGGACTCTGGACAACTTGGGGTATAGAACAGGCTATGCTTACAGGCATCCTCTCATTCGAGAGAA
GCCTAGGCACAAGAGTGATGTGGAAATCCCAGCAACTGTGACTGCTTTTTCCTTTGAAGACGATACAGTG
CCACTCTCTCCTCTCAAATACATGGCACAGAGGCAACAGCGTGAAAAAACAAGATGGCTGAACTCACCAA
ATACTTACATGAAAGTGAATGTGCCTGAGGAGTCTCGGAACGGAGAAACCAGTCCCCGAACCAAAATCAC
GTGGATGAAAGCAGAAGACTCATCTAAAGTTAGTGGTGGAACACCTATCAAAATTGAAGATCCAAATCAG
TTTGTTCCTTTAAACACAAACCCGAATGAGGTACTAGAAAAGAGAAATAAGATTCGGGAACAAAATCGAT
ATGACTTGAAAACAGCAGGACCACAATCTCAGTTGCTTGCTGGAATTGTTGTGGATAAGCCACCTTCTAC
TATGCAATTTGAAGATGATGATCATGGCCCACCAGCTCCTCCTAACCCATTTAGTCATCTCACAGAAGGA
GAACTTGAAGAGTATAAGAGGACAATCGAACGTAAACAACAAGGCCTAGAAGAAAACCATGAGCTGTTTT
CCAAGAGCTTCATCTCCATGGAAGTGCCTGTCATGGTAGTAAATGGCAAGGATGATATGCATGATGTTGA
AGATGAGCTTGCTAAGCGAGTGAGTAGGTTAAGCACAAGTACAACCATAGAAAACATCGAGATTACTATT
AAGTCTCCAGAGAAAATCGAAGAAGTCCTGTCACCTGAAGGCTCCCCTTCAAAATCGCCATCCAAGAAAA
AGAAGAAATTCCGCACTCCTTCTTTTCTGAAAAAGAACAAAAAAAAGGAGAAAGTTGAGGCCTAA

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_019903 unedited
TTTTGTAATACGACTCACTATAGGGCGGCCCGCGAATTCGCACGAGGCCCGTAACGGTCG
CCAGTGTGAGGGGNNCGGGAGGGAAAGAAGAGGGGTTTAAATTAGATTTTTTAAAACACA
GAGCAAGCGCCAGAGGCGTCGGCATCCCAGGTGTCGCCGCTTCCTGCTGCACAGGGCTCG
GCGTACAGGTCCCTCCCTCCTCAAGCCCCCTCCCCTTCTCCCGCCCTACCCTCTGGGGCT
CTGCGGCGCTTAAGAGGCGGCCGCAGCGGCGGATCCGGCGGCTGCTGCAGCCCGGGCGGC
TGCCGAGAAGGAGGGAGGGGAAACACAAAGCCGGCTACGCGCTGCGAGATAACAAGAGTA
ATCCACAGACTTAAAACATGAGCTCAGATGCCAGCCAAGGCGTGATTACCACTCCTCCTC
CTCCCAGCATGCCTCACAAAGAGAGATATTTTGACCGCATCAATGAAAATGACCCAGAAT
ACATTAGGGAGAGGAACATGTCTCCTGATCTACGACAAGACTTCAACATGATGGAGCAGA
GGAAACGAGTTACTCAGATCCTGCAAAGTCCTGCCTTTCGGGAAGACTTGGAATGCCTTA
TTCAAGAACAGATGAAGAAAGGCCACAACCCAACTGGATTACTAGCATTACAGCAGATTG
CAGATTACATCATGGCCAATTCTTTCTCGGGTTTTTCTTCACCTCCTCTCAGTCTTGGCA
TGGTCACACCTATCAATGACCTTNCTGGTGCAGATACATCCTCATATGTGAAGGGAGAAA
AAACTACTCGCTGTANACTTGCCAGCCTGTACAGACTNGTAGACCTGTTGGNATGGGCCA
CCTGNNCAAACCTATATCTCAGTAGAAATAAGTAGGAGCCAGACCACATTATATANTCCN

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_019903 unedited
NTTACTCTGTTAACTAAACCCCTATGTTTGTGTACAAAATCCCTTTGTTGAAAATAAGGG
CTTTCTAAACTAATAAAAAAGGAGTTTTCAAAATTATAGTTTATTAAAACAACTTTTTTG
GCAAACAAAGTTACTTCAGGTGAGGAAATTTTATACTGTGAATAAAATTCCAAATGAATC
TTTTCTTAAAACTTTTTAAAAAATTATGTGCCAGTGTATACTAATGCTATAGATTCTTGT
CTTAGAAGTTTTTAAAGCATTCTGTTAATGCCCACTGAAACAATGGGACTCCAAAAATAT
AGTCAATAATCATGATAAAAAATTATAATATGATTATCAAGTGAAGCAGGTATTGAGAAA
TAAAAATTCTCACTTGCTCACTGGCAATTTCTTTCTAACAGATATTATGGAGAAGGCCTG
AAGTAATTCAGACAGATAGCTGTTTATGGTGAATTATAATAATACTTCATGAGGGCAGAG
CTAATTAAAACTAGTAATTGCTTAAAATTCAAAGCCATTTCTGGACATATAAAATGAGAG
ATGAATCTGAAAGTTTTTCTTTTGTAAAACCTCTTTCCAGTTCTTAAAGTCCAGTTTGCT
ACATCCCCCAATCTGATCTACCATTGCATATTAATGATCAACTTAAATGTGGTATTTAGA
TGTGCAATGTCACATTGTTATAATAATAATTATAAAAAGACTTTATTTAGGCCTCAACTT
TCTCCTTTTTTTTGTTCTTTTTCAGAAAAGAGGAGTGCGGAATTTCTTCTTTTTCTTGGA
TGGCGATTTTGAAAGGGAGCCTTCAGGTGACAGGACTTCTTCGATTTTCTCTGGAGACTT
ATAGTAATCTCGATGTTTTCTATGGTTGTACTTGTGCTTAACCTACTCACTCCCTTACAA
GCTCATCTTCACA

Restriction Sites: NotI-NotI

ACCN: NM_019903

Insert Size: 3000 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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

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_019903.3, NP_063968.1

RefSeq Size: 4195 bp

RefSeq ORF:	2025 bp
Locus ID:	120
UniProt ID:	Q9UEY8
Cytogenetics:	10q25.1-q25.2
Domains:	Aldolase_II
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 adducin gamma transcripts encoding different isoforms have been described. The functions of the different isoforms are not known. [provided by RefSeq, Jul 2008] Transcript Variant: This variant (2) differs in the 5' UTR and lacks an alternate in-frame exon in the 3' coding region compared to variant 1.The encoded isoform (b) is shorter than isoform a. Both variants 2 and 3 encode the same isoform (b).