

Product datasheet for **RC209129**

gamma Adducin (ADD3) (NM_016824) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	gamma Adducin (ADD3) (NM_016824) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	gamma Adducin
Synonyms:	ADDL; CPSQ3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC209129 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGCTCAGATGCCAGCCAAGGCGTGATTACCACTCCTCCTCCTCCAGCATGCCTCACAAAGAGAGAT
 ATTTTGACCGCATCAATGAAAATGACCCAGAATACATTAGGGAGAGGAACATGTCTCCTGATCTACGACA
 AGACTTCAACATGATGGAGCAGAGGAAACGAGTTACTCAGATCCTGCAAAGTCTGCCTTTCGGGAAGAC
 TTGGAATGCCTTATTCAAGAACAGATGAAGAAAGGCCACAACCCAAGTACTAGCATTACAGCAGA
 TTGCAGATTACATCATGGCCAATCTTTCTCGGGTTTTTCTTACCTCCTCCTCAGTCTTGGCATGGTCAC
 ACCTATCAATGACCTTCTGGTGCAGATACATCCTCATATGTGAAGGGAGAAAACTTACTCGCTGTAAA
 CTTGCCAGCTGTACAGACTTGTAGACTGTGGTGGATGGGCACACCTGGCAAATACCTATATCTCAGTAA
 GAATAAGTAAGGAGCAAGACCACATTATAATAATCCAGAGGCCTATCTTTTTCTGAAGCTACAGCCTC
 CAATTTGGTGAAAGTCAATATAATAGGAGAAGTGGTTGACCAGGGAAGTACCAATTTGAAAATTGACCAT
 ACAGGATTCAGTCCCATGCTGCAATCTATTCAACACGTCTGATGTTAAGTGTGTGATACACATCCATA
 CCCTTGCAACAGCAGCTGTATCCTCCATGAAATGTGGGATCCTTCCAATTTCTCAAGAGTCTCTTCTTCT
 GGGAGATGTTGCCTATTATGACTACCAAGGGTCACTTGAAGAACAGGAGGAGAGAATTCAACTGCAGAAG
 GTTCTGGGACCAAGTTGTAAGGTGCTGGTACTCAGGAATCATGGTGTGGTTCGACTTGGAGAAACATTAG
 AGGAGGCTTTTCATTATATTTTTAATGTGCAACTAGCCTGTGAGATTGAGGTGCAGGCCCTAGCAGGTGC
 AGGTGGAGTAGACAATCTCCATGTAAGTGGTTCAGAAAGTATAAAGCTTCACTTACACTGTAGCAGCG
 TCTGGTGGAGGAGGTGTAATATGGGTTCCCATCAAAAATGGAAGGTTGGCGAAAATTGAGTTTGAAGGGC
 TTATGAGGACTCTGGACAACCTGGGGTATAGAACAGGCTATGCTTACAGGCATCCTCTCATTGAGAGAA
 GCCTAGGCACAAGAGTGTGGAATCCAGCAACTGTGACTGCTTTTTCTTTGAAAGACGATACAGTG
 CCACTCTCCTCTCAAATACATGGCACAGAGGCAACAGCGTGAAAAACAAGATGGCTGAACTCACCAA
 ATACTTACATGAAAGTGAATGTGCCTGAGGAGTCTCGAACGGAGAAACAGTCCCGAACCAAAAATCAC
 GTGGATGAAAGCAGAAGACTCATCTAAAGTTAGTGGTGAACACCTATCAAAATTGAAGATCCAAATCAG
 TTTGTTCTTTAAACACAAACCCGAATGAGGTAAGTAAAGAGAAATAAGATTCGGGAACAAAATCGAT
 ATGACTTGAAAACAGCAGGACCACAATCTCAGTTGCTTGTGGAATTGTTGTGGATAAGCCACCTTCTAC
 TATGCAATTTGAAGATGATGATCATGGCCACCAGCTCCTCCTAACCCATTTAGTCATCTCACAGAAGGA
 GAACCTTGAAGAGTATAAGAGGACAATCGAACGTAACAACAAGGCCTAGAAGATGCTGAGCAGGAATTAC
 TCTCAGATGACGTTTCTGTTTCCAAAATTCAGTCTCAAACTCAGTCACCGCAAAAATGTCCTGAAAA
 ATTAGAAGAAAACCATGAGCTGTTTTCCAAGAGCTTCATCTCCATGGAAGTGCCTGTCATGGTAGTAAAT
 GGCAAGGATGATATGCATGATGTTGAAGATGAGCTTGCTAAGCGAGTGAAGTAAAGCACAAGTACAA
 CCATAGAAAACATCGAGATTACTATTAAGTCTCCAGAGAAAATCGAAGAAGTCTGTACCTGAAGGCTC
 CCCTTCAAAATCGCCATCCAAGAAAAGAAGAAATCCGCACTCCTTCTTTTCTGAAAAAGAACAAAAAA
 AAGGAGAAAGTTGAGGCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC209129 protein sequence
Red=Cloning site Green=Tags(s)

MSSDASQGVITTPPPSPMPHKERYFDRINENDPEYIRERNMSPDLRQDFNMMEQRKRVTQILQSPAFRED
 LECLIQEQMKKGHNPTGLLLALQQIADYIMANSFSGFSSPPLSLGMVTPINDLPGADTSSYVKGKELTRCK
 LASLYRLVDLFGWAHLANTYISVRISKEQDHIIIPRGLSFSEATASNLVKVNIIGEVVDQGSTNLKIDH
 TGFSPHAAIYSTRPDVKCVIHIHTLATAAVSSMKCGILPISQESLLLGDVAYDYQGSLEEQEERIQLQK
 VLGPSCKVLVLRNHGVVALGETLEEFHYIFNVQLACEIQVQALAGAGVDNLHVLDLFQYKAFTYTVAA
 SGGGGVNMGSQKWKVGEIEFEGLMRTLNDLGYRTGYAYRHPLIREKPRHKSDVEIPATVTAFSFEDDTV
 PLSPLKYMAQRQREKTRWLNPNNTYMKVNVPEESRNGETSPRTKITWMKAEDSSKVSGGTPIKIEDPNQ
 FVPLNTPNEVLEKRNKIREQNRDYLKTAGPQSLLAGIVVDKPPSTMQFEDDDHGPAPPNPFSHLTEG
 ELEEYKRTIERKQGLEDAEQELLSDASSVSQIQSQTQSPQNVPEKLEENHELFSKSFISMEVPMVVN
 GKDDMHVDEDELAKRVSRLSTSTTIENIEITIKSPEKIEEVLSPGSPSKSPSKKKKKFRTPSFLKKNKK
 KEKVEA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6070_d05.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_016824

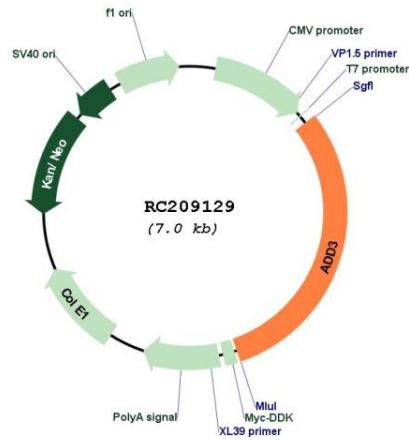
ORF Size: 2118 bp

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](#)

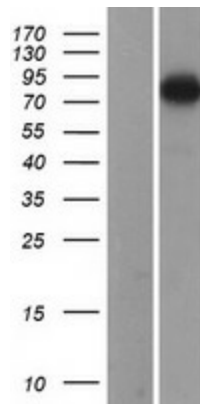
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<ol style="list-style-type: none">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_016824.5
RefSeq Size:	4454 bp
RefSeq ORF:	2121 bp
Locus ID:	120
UniProt ID:	Q9UEY8
Cytogenetics:	10q25.1-q25.2
Domains:	Aldolase_II
MW:	79.2 kDa
Gene Summary:	<p>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]</p>

Product images:



Circular map for RC209129



Western blot validation of overexpression lysate (Cat# [LY402581]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209129 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ADD3 protein (Cat# [TP309129]). The protein was produced from HEK293T cells transfected with ADD3 cDNA clone (Cat# RC209129) using MegaTran 2.0 (Cat# [TT210002]).