OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC114710

ARHGEF9 (NM_015185) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ARHGEF9 (NM_015185) Human Untagged Clone
Tag:	Tag Free
Symbol:	ARHGEF9
Synonyms:	COLLYBISTIN; DEE8; EIEE8; HPEM-2; PEM-2; PEM2
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>NCBI ORF sequence for NM_015185, the custom clone sequence may differ by one or more nucleotides

ATGACGTTGCTGATCACTGGAGATTCCATCGTTAGTGCTGAGGCAGTATGGGATCACGTCACCATGGCCA
ACCGGGAGTTGGCATTTAAAGCTGGCGACGTCATCAAAGTCTTGGATGCTTCCAACAAGGATTGGTGGTG
GGGCCAGATCGACGATGAGGAGGGATGGTTTCCTGCCAGCTTTGTGAGGCTCTGGGTGAACCAGGAGGAT
GAGGTGGAGGAGGGGCCCAGCGATGTGCAGAACGGACACCTGGACCCCAATTCAGACTGCCTCTGTCTGG
GGCGGCCACTACAGAACCGGGACCAGATGCGGGCCAATGTCATCAATGAGATAATGAGCACTGAGCGTCA
CTACATCAAGCACCTCAAGGATATTTGTGAGGGCTATCTGAAGCAGTGCCGGAAGAGAAGGGACATGTTC
AGTGACGAGCAACTGAAGGTAATCTTTGGGAACATTGAAGATATCTACAGATTTCAGATGGGCTTTGTGA
GAGACCTGGAGAAACAGTATAACAATGATGACCCCCACCTCAGCGAGATAGGACCCTGCTTCCTAGAGCA
CCAAGATGGATTCTGGATATACTCTGAGTATTGTAACAACCACCTGGATGCTTGCATGGAGCTCTCCAAA
CTGATGAAGGACAGCCGCTACCAGCACTTCTTTGAGGCCTGTCGCCTCTTGCAGCAGATGATTGACATTG
CTATCGATGGTTTCCTTTTGACTCCAGTGCAGAAGATCTGCAAGTATCCCTTACAGTTGGCTGAGCTCCT
AAAGTATACTGCCCAAGACCACAGTGACTACAGGTATGTGGCAGCTGCTTTGGCTGTCATGAGAAATGTG
ACTCAGCAGATCAACGAACGCAAGCGACGTTTAGAGAATATTGACAAGATTGCTCAGTGGCAGGCTTCTG
TCCTAGACTGGGAGGGCGAGGACATCCTAGACAGGAGCTCGGAGCTGATCTACACTGGGGAGATGGCCTG
GATCTACCAGCCCTACGGCCGCAACCAGCAGCGGGTCTTCTTCCTGTTTGACCACCAGATGGTCCTCTGC
AAGAAGGACCTAATCCGGAGAGACATCCTGTACTACAAAGGCCGCATTGACATGGATAAATATGAGGTAG
TTGACATTGAGGATGGCAGAGATGATGACTTCAATGTCAGCATGAAGAATGCCTTTAAGCTTCACAACAA
GGAGACTGAGGAGATACATCTGTTCTTTGCCAAGAAGCTGGAGGAAAAAATACGCTGGCTCAGGGCTTTC
AGAGAAGAGAGGAAAATGGTACAGGAAGATGAAAAAATTGGCTTTGAAATTTCTGAAAACCAGAAGAGGC
AGGCTGCAATGACTGTGAGAAAAGTCCCTAAGCAAAAAGGTGTCAACTCTGCCCGCTCAGTTCCTCCTTC
CTACCCACCACCGCAGGACCCGTTAAACCACGGCCAGTACCTGGTCCCCGACGGCATCGCTCAGTCGCAG
GTCTTTGAGTTCACCGAACCCAAGCGCAGCCAGTCACCATTCTGGCAAAACTTCAGCAGGTTAACCCCCT
TCAAAAAATGA

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_015185 unedited
CATTTTGTAATACGACTCACTTATAGGGCGGCCGCGAATTCGCACGAGGGGGAAAACGAG
CGAAGTAAAGGGAGTAGGGGAGACTGAGACTGACCGGTAGCCAGGCAGGCGGACGGACGC
ACGCCCGGACAGACTGAGCAGGCGCCGGAGAACCACTCACAGGTTCCCCCCGCCTTTCCC
TTTGAAAGCTAGGATTTTGCCTTTCCCGTGGCGCCCGAGAGAGAATGCTGGACTCTGCCG
ACTTCAGCGCAAGCTAAGATTTCTCAGCTAGGGACAAACGATCAGCCCAATCCTGAGAAG
GGGGGAACCAAGCACCCCGTCCCCATCCCCCTCCCCTCCCCCGACTAAACTCGGGCGCCA
AACCCAGCCCTTCTCTAACCACCCTACTTCCTCCTCTCCTTTCTAGCATGGTGGCTGTAT
GGACAGTCTGACAGAACAGAGACTGACATCTCCCAATCTGCCGGCCCCCCACCTGGAACA
CTACAGTGTTCTGCATTGCACCATGACCCTGGATGTGCAAACTGTAGTCGTTTTTGCCGT
GATTGTAGTCCTCCTGCTTGTCAATGTCATACTCATGTTTTTCCTGGGAACGCGCTGAAT
GGAGTCCAGCCACCTGAGCTGTCGCGAACTCTCGCTNTGATTTCATCCCGAGAGCCACCG
AGAAAAAAAAAAAATCACAGACAGAGACAGGGAAAGAGAGAGAAAGAACAAGCTNTCTTA
CTCAGGGGGGAANAACGTTNTGAGCTTCAACATGGCCTCGCTGTGATATCTGATCACTGG
AGATTCCATCGTTAGTGCTGNAGCAGTATGGGATCACGTCACCATGGCCAACCGGNNAGT
GGGCATTAAAGCTGGCGACGTCATCAAAGTCTGGGATGCTTNCACAGGNATNGTTGGTGG
NGCCANATCGACGATAGGNAGGGATGGGTTCCTGCCAGCTTGTGAGGCTCTGGGTGACAN
NAGNATTAGTGNAGGAGGGCC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_015185 unedited
CGGCACGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTATAATTTTATTTACTTTATT
TTAAAATTATCTGCCTCCCTGTAGGTATCATTTTTTGAAGGGGGTTAACCTGCTGAAGTT
TTGCCAGAATGGTGACTGGCTGCGCTTGGGTTCGGTGAACTCAAAGACCTGCGACTGAGC
GATGCCGTCGGGGACCAGGTACTGGCCGTGGTTTAACGGGTCCTGCGGTGGTGGGTAGGA
AGGAGGAACTGAGCGGGCAGAGTTGACACCTTTTTGCTTAGGGACTTTTCTCACAGTCAT
TGCAGCCTGCCTCTTCTGGTTTTCAGAAATTTCAAAGCCAATTTTTTCATCTTCCTGTAC
CATTTTCCTCTCTTCTCTGAAAGCCCTGAGCCAGCGTATTTTTTCCTCCAGCTTCTTGGC
AAAGAACAGATGTATCTCCTCAGTCTCCTTGTTGTGAAGCTTAAAGGCATTCTTCATGCT
GACATTGAAGTCATCATCTCTGCCATCCTCAATGTCAACTACCTCATATTTATCCATGTC
AATGCGGCCTTTGTAGTACAGGATGTCTCTCCGGATTAAGTCCTTCTTGCAGAGGACCAT
CTGGTGGTCAAACAGGAAGAATACCCGCTGCTGGTTGCGGCCGTNAGGCTGGTANATCCA
GGCCATCTCCCCAGTGTAGATCAGCTCCGAGCTCCTGTCTAGGATGTCCTCGCCCTCCCA
GTCTATGACAGAAGCCTGCCACTGAGCAATCTTGTCAATATTCTCTAAACGTCGCTTGCG
TTCGTTGATCTGCTGAGTCACATTTCTCATGACAGCCAAAGCAGCTGCCACATACCTGTT
AGTCACTGGTGGTCTTTGGGCAGTATACCTTTAGGAGCTCAGCCACCTGTAAAGGATACT
TGCAGATCTTCTGCCCTTAGTCAAAAGGAACCATCGATAGCATGTCATCATCTGCTGCAG
AAGCGACAGCCTCAATAATTGCTGGGTACCN

Restriction Sites: NotI-NotI

ACCN: NM_015185

Insert Size: 2380 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).

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_015185.1, NP_056000.1

RefSeq Size: 5413 bp

RefSeq ORF: 1551 bp

Locus ID: 23229

UniProt ID: O43307

Cytogenetics: Xq11.1

Domains: RhoGEF, SH3, PH

Gene Summary: The protein encoded by this gene is a Rho-like GTPase that switches between the active (GTP-bound) state and inactive (GDP-bound) state to regulate CDC42 and other genes. This brain-specific protein also acts as an adaptor protein for the recruitment of gephyrin and together these proteins facilitate receceptor recruitement in GABAnergic and glycinergic synapses. Defects in this gene are the cause of startle disease with epilepsy (STHEE), also known as hyperekplexia with epilepsy, as well as several other types of cognitive disability. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2017]
Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1).