

Product datasheet for **SC318956**

Ephexin 1 (NGEF) (NM_001114090) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ephexin 1 (NGEF) (NM_001114090) Human Untagged Clone
Tag:	Tag Free
Symbol:	Ephexin 1
Synonyms:	ARHGEF27; EPHEXIN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_001114090, the custom clone sequence may differ by one or more nucleotides

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ATGGAGCTGCTGGCCGCTGCCTTCAGCGCCGCTGCGCCGTGGACCACGACAGTCCACCTCGGAAAGCG
ACGCGCGCGACTCGGCGCGGGACACCTGCCCGCAGTGAGTCGTCTCCACCCCGGAAATGGGGCCAC
GCCCCGAGGAGTGGCCGGCCCTGGCCGACAGCCCCACCACGCTCACCGAGGCCCTGGGATGATCCACCCC
ATTCCCGCCGACTCTGGAGAAACCTCATTGAACAAATAGGGCTCCTGTATCAGGAATACCGAGATAAAT
CGACTCTCCAAGAAATCGAAACCAGGAGCAACAGGATGCAGAAATAGAAGACAATACCAATGGGTCCCC
GGCCAGTGAGGACACCCCGGAGGAGGAAGAAGAAGAGGAGGAGGAGGAGCCGCCAGCCACCAGAG
AGGAAGACTCTGCCCAGATCTGCCTGCTCAGTAACCCCCACTCAAGGTTCAACCTCTGGCAGGATCTTC
CCGAGATCCGAGCAGCGGGGTGCTTGAGATCCTACAGCCCGAGGAGATTAAGCTGCAGGAGGCCATGTT
CGAGCTGGTCACTCCGAGGCGTCTACTACAAGAGTCTGAACCTGCTCGTGTCCCACTTATGGAGAAC
GAGCGGATAAGGAAGATCTGCACCCGTCGAGGCGCACATCCTCTTCCAACGTCCTGGACGTGCTGG
CTGTCAGTGAGCGGTTCTCCTGGAGCTGGAGCACCGGATGGAGGAGAACATCGTCATCTCTGACGTGTG
TGACATTTGTACCGTTATGCGGCCGACCACTTCTGTCTACATCACCTACGTCAGCAATCAGACCTAC
CAGGAGCGGACCTATAAGCAGCTGCTCCAGGAGAAGGCAGCTTCCGGGAGCTGATCGCGCAGCTAGAGC
TCGACCCCAAGTCAGGGGGTGCCTTCTCCTCCTCATCCTGCCTTCCAGAGGATCACACGCT
CAAGCTGTTGGTCCAGAACATCCTGAAGAGGGTGAAGAGAGGCTGAGCGGGAGTGCAGTCTTTGGAT
GCTCACAAGGAGCTGAAATGGTGGTGAAGGATGCAACGAGGGCGTCAGGAAAATGAGCCGCACGGAAC
AGATGATCAGCATTGAGAAGAAGATGGAGTTCAAGATCAAGTCGTTGCCATCATCTCCCACTCCCGTGT
GCTGCTGAAGCAGGGTGAGCTGCAGCAGATGTCAGGCCCAAGACCTCCCGGACCTGAGGACCAAGAAG
CTCTTCCACGAAATTTACCTCTTCTGTTCAACGACCTGCTGGTGTGATCTGCCGCGAGATTCCAGGAGAC
AGTACCAGGTATTTGACTCAGTCCGCGGGGACTGCTGCGTGTGGAGGAGCTGGAGGACCAGGGCCAGAC
GCTGGCCAACGTGTTTCATCCTGCGGCTGCTGGAGAACGCAGATGACCGGGAGGCCACCTACATGCTAAAG
GCGTCTCTCAGAGTGAGATGAAGCGTTGGATGACCTCACTGGCCCCAACAGGAGGACCAAGTTTGT
CGTTCACATCCCGGCTGCTGGACTGCCCCAGTCCAGTGCCTGCACCCATACGTGGCTCAGCAGCCAGA
CGAGCTGACGCTGGAGCTCGCCGACATCCTCAACATCCTGGACAAGACTGACGACGGGTGGATCTTTGGC
GAGCGTCTGCACGACCAGGAGAGAGGCTGGTCCCCAGTCCATGACTGAGGAGATCTTGAATCCCAAGA
TCCGGTCCCAAGACCTCAAGGAATGTTCCGTGCCACAAGATGGATGACCTCAGCGCAGCCAGAACA
GGACCGCAGGAAGCTGGCAGCCGAATCGGCAATGA
    
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Restriction Sites: Please inquire

ACCN: NM_001114090

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](#)

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:	<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:	<u>NM_001114090.1</u> , <u>NP_001107562.1</u>
RefSeq Size:	2812 bp
RefSeq ORF:	1857 bp
Locus ID:	25791
UniProt ID:	<u>Q8N5V2</u>
Cytogenetics:	2q37.1
Protein Pathways:	Axon guidance
Gene Summary:	<p>Acts as a guanine nucleotide exchange factor (GEF) which differentially activates the GTPases RHOA, RAC1 and CDC42. Plays a role in axon guidance regulating ephrin-induced growth cone collapse and dendritic spine morphogenesis. Upon activation by ephrin through EPHA4, the GEF activity switches toward RHOA resulting in its activation. Activated RHOA promotes cone retraction at the expense of RAC1- and CDC42-stimulated growth cone extension (By similarity).[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (2) differs in the 5' UTR and coding region compared to variant 1. The resulting isoform (2) has a shorter and distinct N-terminus compared to isoform 1.</p> <p>Sequence Note: This RefSeq record was created from transcript and genomic sequence data because no single transcript was available for the full length of the gene. The extent of this transcript is supported by transcript alignments.</p>