

## Product datasheet for MC224196

### Arhgef10 (NM\_001037736) Mouse Untagged Clone

#### Product data:

|                           |                                                                                    |
|---------------------------|------------------------------------------------------------------------------------|
| Product Type:             | Expression Plasmids                                                                |
| Tag:                      | Tag Free                                                                           |
| Symbol:                   | Arhgef10                                                                           |
| Synonyms:                 | 6430549H08Rik; mKIAA0294                                                           |
| Mammalian Cell Selection: | Neomycin                                                                           |
| Vector:                   | pCMV6-Entry (PS100001)                                                             |
| E. coli Selection:        | Kanamycin (25 ug/mL)                                                               |
| Fully Sequenced ORF:      | >MC224196 representing NM_001037736<br>Red=Cloning site Blue=ORF Orange=Stop codon |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCTGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGGAGCAGGGAGAGGCCCTCACCTCCTGTTCTCCTGCAGAACATGAAGCGAAATGTGACACCAGCAACAACG  
AAGAGGAGGGAGAAGTCTTTGACTTCGACAGTGGAGATGAAGTTCCCGAAGCGGATCGGCAAGTCCCGTC  
TGCCGACGATAGGACGAGAGGTGCTGAAGCAGGAGGTGCAGACGAGAACACGTGCCCTGCAGGAAATGGA  
ACTGGAGCTGAACCTGCCCCGAGGCAGAGCCTGCGAACTTGTGGTCCCCACAAAAGTGAACCCGTATT  
CTGTCTCGACATCAGCCGCTGCAGGAAGACCAGCCGTCATCTCCAGACGCGAATACAGAGGAGGAAGG  
CGTGGGCTGCGTGTGCCAGTGGTACTCTGTGCTGTGCCCTGTGGCTATGCTGTCCCTCCAACCTG  
CCATTGCTGCTGCTGCTACTCCAGTCTGTCTCATCTCCGAGCCGAGTCTGTAGAGGAGGAAGAAGCAG  
CAGAACTGTGGGAGATGGGCAGTGAATTCCTAAGCTCCGAGGACCTCCACACAGCAGTGAGCAAGG  
CAGCCAAGAAGGCAGTGCCTGGCCGATGGGCAGCCGACCTGCCAACACAGCATGGATGGAAAATCCA  
GAGGAAGCAATTTACGACGACGTTCCGAGGAAAACTCGGACTCTGAGCCAGATGAAATGATTTATGATG  
ATGTGGAGAACGGCGAAGAAGGTGGAACAGCTCCCCAGAGTACGGGTGGAGTTCACGCGAATTCGAAAG  
CTATGAGGAGCCAAGCGACTCGGAGGGCAAGAACGGAATTCAGGTCTTCTGCGCAGCAGTCATAAA  
AAGCAAATGCAGAAGCTTATGAAGGCAGCCAAGGAGGGCACCAAGATGGGCTGGAGAAAAACCAAGCTG  
CTGTGAAGAGAGGCGGCTCCTTCATCAGGACCAGGTCCTTGGTCTCTCAAGATCACAGGTGTTATTTTGA  
AGAAGAGCAGAATTTGTTCAATGACGTGGACTGCAAGCACCCGGAGGCTGTCTCACCCCAATGCCCGAG  
GGCTTGTCTCAGCAGCAGGTTGTGAGAAGATACATTCTGGGCTCCATTGTTGAGAGCGAGAAGAAGTATG  
TAGATGCTCTCCGAGGATTTTGGAGCAATATGAGAAGCCGCTGTCTGAGATGGAGCCCCGGCTCCTGAG  
TGACAGGAAGCTCAGGATGGTTTTCTACCGCTCAAGGAGATCCTGCAGTGTCACTCCATGTTCCAGATT  
GCGCTGGCCAGCCGCTGTCCGAGTGGGATGTCGTGGAACAATCGGCGACGTTTTTGTGGCTCGTTCT  
CCAAGTCCATGGTGTGGATGCTTACAGCAGTACGTGAACAATTCAGCACGGCCGTGGCTGTCTCTCA  
GAAGACGTGTGCCACAAAGCTGCTTCTTGAAGTCTTAAAGCTGAGCCAGGATTCAGTCCAGACCGA  
GTCACACTCCACAGCCTTATGATGCGGCCATCCAGAGGTTCCACAGTTCATCCTCTACTGCAGGACA



TGCTGAAGAACACCGCCAAAGGACATCCTGACAGGCTGCCCTTCAGATGGCGCTGACGGAGCTCGAGAC  
CCTGGCAGAGAAGCTAAACGAGAGAAAAAGAGATGCCGACCAGCGATGCGAAATCAAACAAATAGCAAAA  
GCCATAAACGAGAGATACCTGAACAAGCTCCTCAGCAGTGGAACCGGTACCTCGTCCGGTCCGATGACG  
TCATCGAGACGGTTTACAACGACCGGGGAGAAAATCGTCAAGACCAAAACACGCCGGATCTTCATGCTGAA  
TGACGTGCTCATGTGTGCCACCGCCAGCTCACGGAACCTACATGAAAGCCATGCCGTGATGAGCCAGAGG  
TACCTGCTCAAGTGGAGTGTCCCTTAGGTACGTGGATGTGATTAGTACAATGGAGGCTCTGGCGCCG  
GGGAGCACTGTCCGACCACGCTGCACACTCACCTGAGAGCCTGGCCGTGGTGGCCAAACGCAAGCCACA  
CAAAGTTTACATGGGGCCAGGGCAGCTGTACCAGGATCTGCAGAACCTACTGCACGACCTGAACGTTGTT  
GGCCAGATCTCGCAGCTGATAGGAAACCTCCGAGGGAGCTATCAGAACTTAAACCACTGTAGCCCATG  
ATTGGACGTCCGGCTTACACGGCTGATCTGAGGAAAGAAGATGCGATCAGAGCTGCCGACCGCTGCCG  
GATCCAGTTACAGCTCCCGGAAAGCAGGACAAGTCCGGGCGGCCACGTTCTTCACTGCTGTGTTCAAT  
ACGCTTACACCAGCCATCAAGGAGTCTGGGTGACGAGCCTGCAGATGGCCAAGCTGGCCCTTGAGGAGG  
AGAACCATATGGGATGTTCTGTGTGGATGACGATGGCAACCTAGCCAAGAAGGAGACACACCCTCTCCT  
GGTGGGACACATGCCTGTGATGGTGGCCAAGCAGCCAGAGTTCAAGATTGAATGTGCAGTTATAACCT  
GAACCTTACCTGAGCAATGAAAGTCAACCAGCCTCACCTCCACAGCCCGTGGCTTTCTGTGGATTGGAA  
GCTGTAGCAACCAGATGGGTGAGGTGCGCATTGTCTCTTCAAGGTTCCAACCCCAAAGTCATCGAGTG  
CTTCAATGTGGAATCACGCATCCTGTGTATGGTATACATTCGCCGACAGGAGTCAAAGCCCCAAGAAACC  
ACCGAAACCAAGGATCCAGAAGCCACAGCCTCGAGAGCACCCCATGTGCCACCATCTGCCTGGGCACAG  
AAGAGGGAAGCATTTCCATTTACAAAAGCAGTCAGGGTGCAGAAAGGTGAGGCTTCAGCACTTCTATGC  
ACCGGACAAGTCCACGGTCATGAGCTTGGCTGCTCCCAACAAGGCTGTATGCAGGCCTGGTCAATGGG  
TCCGTAGCCAGCTACACCAAGGCTCCAGATGGATCCTGGAACCTCGGAACCCAGCAAGTGATCAAGTTGG  
GTGCTCTGCCAGTCAGAAGCCTTCTCCTGGTGGAGGTGCACTGTGGGCAGCCTCGGAGGGCAGGTGTT  
CATGGCCAGCGTGGAGACTCACACTATAGAGAATCAGCTGGAGGCCACCAAGATGAAGGGATGGTCATC  
TCCACATGGCTGTGGCTGGCGTTGGCATCTGGATTGCCTTCACTCGGGGTCCACCCTCCGCCTCTTCC  
ACACAGAGACCTTGAAGCACCTGCAGGATGTCAACATTGATGCCCTGTGCATAGCATGCTGCCAGGGCA  
CCAGCGTCTATCTGTGACCAGCCTGCTCGTCTGCCACGGCTTGCTCATGGTCGGTACCAGCCTGGGTGTC  
GTGGTGGCCCTGCCAGTCCCTCGGCTTCAAGGTATCCCAAGTGACAGGGCGAGGCATGGTCTCCTACC  
ATGCGCATAACGGGCCCGTTAAGTTTCATCTCTCAGCCACGGCGTTTCAAAACAAGGACAGAGCCAGGGA  
CAGCCACGTTCCGGTTCTGAGCTTCAAGTGAAGACCCCAAGGACTTGCTCTGCAGCGAGGAAGGTCTCT  
TCCTGCCCGGGCCAGCCTGACACCTACACATCCGTTTGGTTGGGAGACTCCCTAGGATTGCCAACTCAA  
AGAATGATCTGTCTTCTGCTCTCGGGTCACTGAACCTGTCCATGGCTCCAGTTCCTAGAGCACAGATC  
TGTGGACAGCAGTCTGTGTGACCTGCTGAGGGACCCAGTGCCTCCCAAGGAGCAGACCACAGGGCTCT  
AGGCGAGCAAGAGCCAGTTCAAGCGTGGTGGTATGTGGGGGCCAGGGCCACCGCGGGTGACAGGAAGG  
CCAGGCAGCCTTCTCAGGAGGACCTGGTTTCTTCAGTGATGGTGTGGCAGATCCCCCTGTGGGCATGTA  
G

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:**

SgfI-MluI

**ACCN:**

NM\_001037736

**Insert Size:**

3921 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).

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol> |
| <b>Note:</b>                  | Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>RefSeq:</b>                | <u>NM_001037736.2, NP_001032825.1</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>RefSeq Size:</b>           | 5424 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>RefSeq ORF:</b>            | 3921 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Locus ID:</b>              | 234094                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>UniProt ID:</b>            | <u>Q8C033</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Cytogenetics:</b>          | 8 A1.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Gene Summary:</b>          | <p>May play a role in developmental myelination of peripheral nerves.[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (2) lacks an alternate in-frame exon in the 5' coding region, compared to variant 1. This encodes isoform b, which is shorter than isoform a.</p>                                                                                                                                                                                                                          |