

## Product datasheet for **SC127108**

### **D4 (ARHGDI2) (NM\_001175) Human Untagged Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	D4 (ARHGDI2) (NM_001175) Human Untagged Clone
Tag:	Tag Free
Symbol:	D4
Synonyms:	D4; GDIA2; GDID4; Ly-GDI; LYGDI; RAP1GN1; RhoGDI2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC127108 sequence for NM_001175 edited (data generated by NextGen Sequencing)

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ATGACTGAAAAAGCCCCAGAGCCACATGTGGAGGAGGATGACGATGATGAGCTGGACAGC
AAGCTCAATTATAAGCCTCCACCACAGAAGTCCCTGAAAGAGCTGCAGGAAATGGACAAA
GATGATGAGAGTCTAATTAAGTACAAGAAAACGCTGCTGGGAGATGGTCCTGTGGTGACA
GATCCGAAAGCCCCAATGTCGTTGTCACCCGGCTCACCTGGTTTGTGAGAGTGCCCCG
GGACCAATCACCATGGACCTTACTGGAGATCTGGAAGCCCTCAAAAAGGAAACCATTGTG
TTAAAGGAAGGTTCTGAATATAGAGTCAAAATTCACCTCAAAGTGAACAGGGATATTGTG
TCAGGCCGTGAAATACGTTACGACACCTACAGGACTGGGGTGAAGTGGATAAAGCAACA
TTTATGGTTGGCAGCTATGGACCTCGGCCTGAGGAGTATGAGTTCCTCACTCCAGTTGAG
GAGGCTCCAAGGCATGCTGGCCCGAGGCACGTACCACAACAAGTCCTTCTTACCGAC
GATGACAAGCAAGACCACCTCAGCTGGGAGTGGAACTGTCGATTAAGAAGGAGTGGACA
GAATGA
```

Clone variation with respect to NM\_001175.4  
42 t=>c;504 g=>c



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<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for NM_001175 unedited TTGTAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGAGACGTGAAGCACTG AATAAATAGATCAGAATGACTGAAAAAGCCCCAGAGCCACATGTGGAGGAGGATGACGAT GATGAGCTGGACAGCAAGCTCAATTATAAGCCTCCACCACAGAAGTCCCTGAAAGAGCTG CAGGAAATGGACAAAGATGATGAGAGTCTAATTAAGTACAAGAAAACGCTGCTGGGAGAT GGTCCTGTGGTGACAGATCCGAAAGCCCCCAATGTCGTTGTCACCCGGCTCACCCCTGGTT TGTGAGAGTGCCCCGGGACCAATCACCATGGACCTTACTGGAGATCTGGAAGCCCTCAA AAGGAAACCAATTGTGTTAAAGGAAGGTTCTGAATATAGAGTCAAAATTCACCTCAAAGTG AACAGGGATATTGTGTCAGGCCTGAAATACGTTTACGACACCTACAGGACTGGGGTGAAA GTGGATAAAGCAACATTTATGGTTGGCAGCTATGGACCTCGGCCTGAGGAGTATGAGTTC CTCACTCCAGTTGAGGAGGCTCCCAAGGGCATGCTGGCCCGAGGCACGTACCACAACAAG TCCTTCTTACCAGCAGTACAAGCAAGACCACCTCAGCTGGGAGTGGAACCTGTGCGATT AAGAAAGAGTGGACAGAATGAATGCATCCACCCCTTCCACCGTTGCCACCTGNAAGA AATCTCTCAGGGCGTGCAGCACCTGTCCCTTCTCCCTGTCACAGCTGGGTCCCTCTTC ACACTGCCACATTNCTTATGATGCATCTTNCACCTGCTACTCACGTGGTCCTANAAC AGAGCTAAANCGNCTTNCACCACTGCTCCTTGATCTNCATAGGNCNATCTTCCAGTCTC ANCTAGACACATCATTATAATTCCTGGCTACCCTATCAGCACTAAGCCAAAATGGGCAT ATACTAAGGCTTNGACTAGTNNCGANTCATCATGCTAATTCTTTGGGTGTGCTGCCAAGG CN
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_001175
<b>OTI Disclaimer:</b>	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).
<b>Components:</b>	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>RefSeq:</b>	<a href="#">NM_001175.4</a> , <a href="#">NP_001166.3</a>
<b>RefSeq Size:</b>	1216 bp
<b>RefSeq ORF:</b>	606 bp
<b>Locus ID:</b>	397
<b>UniProt ID:</b>	<a href="#">P52566</a>
<b>Cytogenetics:</b>	12p12.3
<b>Domains:</b>	Rho_GDI
<b>Protein Families:</b>	Druggable Genome

**Protein Pathways:** Neurotrophin signaling pathway

**Gene Summary:** Members of the Rho (or ARH) protein family (see MIM 165390) and other Ras-related small GTP-binding proteins (see MIM 179520) are involved in diverse cellular events, including cell signaling, proliferation, cytoskeletal organization, and secretion. The GTP-binding proteins are active only in the GTP-bound state. At least 3 classes of proteins tightly regulate cycling between the GTP-bound and GDP-bound states: GTPase-activating proteins (GAPs), guanine nucleotide-releasing factors (GRFs), and GDP-dissociation inhibitors (GDIs). The GDIs, including ARHGDIB, decrease the rate of GDP dissociation from Ras-like GTPases (summary by Scherle et al., 1993 [PubMed 8356058]).[supplied by OMIM, Dec 2010]