

## Product datasheet for **RC205479**

### Rhophilin 2 (RHPN2) (NM\_033103) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Rhophilin 2 (RHPN2) (NM_033103) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Rhophilin 2
Synonyms:	P76RBE; RHOBP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC205479 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGACCGACGCGCTGTTGCCCGCGGCCCCACGCCGCTGGAGAAGAAGAACGACGCTACTTTCCGAAGG  
 GCTGTAATCCCCTTGACAAACCGGCCGGAGTAAATTGCAGAATCAAAGAGCTGCTTTGAATCAGCAGAT  
 CCTGAAAGCCGTGCGGATGAGGACCGGAGCGGAAAACCTTCTGAAAGTGGCCACAAACTCAAAGGTGCGG  
 GAGCAAGTGGCGCTGGAGCTGAGCTTCGCAACTCAGACCTGCAGATGCTCAAGGAAGAGCTGGAGGGGC  
 TGAACATCTCGGTGGGCTCTATCAGAACACAGAGGAGGCATTTACGATCCCCTGATTCCTCTTGGCCT  
 GAAGGAAACGAAAGACGTCGACTTTGCAGTCGCTCAAGGATTTATCCTGGAACATTACAGTGAAGAT  
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 ATGAGGCCGGGTGGAAGTGTGATGACATACTCATCCAGCTGGGCTTGTGCGAGAGTCGATTCTTCCC  
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 GTGATCGGCAGACGCAGGCTGGGCTGGAGAGTGCCATAGATGCCTTTAGAGAGCCCGAGGGGTTTTAA  
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 TCTTATGCTGGTGAAGTGGCTCAGGAGGCTGCTAAGGTGGGAGAGGTCTACCAACAGCTACACGCAGC  
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 CACTACGCGGCCCTGGCCACTACTTCACTGCCATCCTCTCATCGACCACAGGTGAAGCCAGGACCGG  
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 GAGGAGTCGGTGCGGGAGGCCAGCCTCTGCAAGAAGCTGCGGAGCATTGAGGTGCTACAGAAGGTGCTGT  
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 CGACGCCCCAGTGTGTTGCTAAAAGTGAAGAGGTTGACATTATATTGCCCCAGTTCTCCAAGCTG  
 ACAGTCACGGACTTCTTCCAGAAGCTGGGCCCTTATCTGTGTTTTCGGCTAACAAAGCGGTGGACGCCTC  
 CTGAAGCATCCGCTTCACTGCAGAAGAAGGGACTTGGGGTTCACCTTGAGAGGGAACGCCCCCGTTCA  
 GGTTCACTTCTGGATCCTTACTGCTCTGCCTCGGTGGCAGGAGCCGGGAAGGAGATTATATTGCTCC  
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 ACGAGATCGAGATGAAAGTCGTGAGCCTCCTGGACTCCACATCATCCATGCATAATAAGAGTGCCACATA  
 CTCCGTGGGAATGCAGAAAACGTAATCCATGATCTGCTTAGCCATTGATGATGACGACAAAACGATAAAA  
 ACCAAGAAAATCTCCAAGAAGCTTCTTCTGAGTTGGGGCACCAACAAGAACAGACAGAAGTCAGCCA  
 GCACCTTGTGCCTCCATCGGTCCGGGCTGCACGGCCTCAGGTCAAGAAGAAGCTGCCCTCCCCTTTCAG  
 CCTTCTCAACTCAGACAGTTCTTGGTAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC205479 protein sequence  
Red=Cloning site Green=Tags(s)

```
MTDALLPAAPQPLEKNDGYFRKGCNPLAQTGRSKLQNQRAALNQQILKAVRMRTGAENLLKVATNSKVR
EQVRELELSEVNSDLQMLKEELEGLNISVGVYQNTTEEAFTIPLIPLGLKETKDVFVVLKDFILEHYSED
GYLYEDEIADLMDLRQACRTPSRDEAGVELLMTYFIQLGFVESRFFPPTRQMGLLFTWYDSLTPGVPVSQQ
NLLLEKASVLFNTGALYTIQIGTRCDRQTQAGLESAIDAFQRAAGVLYNLYKDTFFHTHTPSYDMSPAMLSVLV
KMMLAQAEQESVFEEKISLPGIRNEFFMLVKVAQEAQVGEVYQQLHAAMSQAPVKENIPYSWASLACVKAH
HYAALAHYFTAILLIDHQVPGTDLDHQEKLSQLYDHMPEGLTPLATLKNQDQRRQLGKSHLRRAMAHH
EESVREASLCKKLRSEIEVLQKVLCAAQERSRLTYAQHQEEDLLNLDAPSVAKTEQEVDIILPQFSKL
TVTDFQKLGPLSVFSANKRWTPPRSIRFTAEEGDLGFTLRGNAPVQVHFLDPYCSASVAGAREGDYIVS
IQLVDCKWLTLEVMKLLKSFGEDEIEMKVVSLLDSTSSMHNKSATYSVGMQKYSMICLAIDDDDKTDK
TKKISKKLSFLSWGNTKNRQKSASTLCLPSVGAARPQVKKKLPSPFLLNSDSSWY
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6236\\_e06.zip](https://cdn.origene.com/chromatograms/mk6236_e06.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_033103

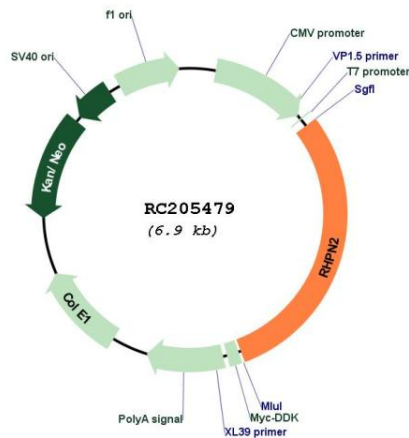
**ORF Size:** 2058 bp

**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](#)

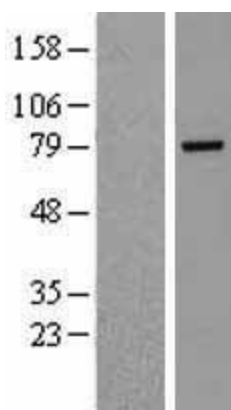
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<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>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_033103.3, NP_149094.2</u>
<b>RefSeq Size:</b>	3546 bp
<b>RefSeq ORF:</b>	2061 bp
<b>Locus ID:</b>	85415
<b>UniProt ID:</b>	<u>Q8IUC4</u>
<b>Cytogenetics:</b>	19q13.11
<b>Domains:</b>	HR1, BRO1
<b>MW:</b>	77 kDa
<b>Gene Summary:</b>	This gene encodes a member of the rhophilin family of Ras-homologous (Rho)-GTPase binding proteins. The encoded protein binds both GTP- and GDP-bound RhoA and GTP-bound RhoB and may be involved in the organization of the actin cytoskeleton. [provided by RefSeq, Apr 2009]

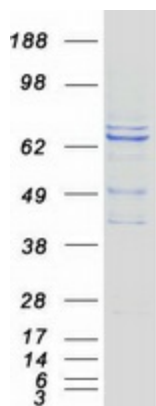
**Product images:**



Circular map for RC205479



Western blot validation of overexpression lysate (Cat# [LY409747]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205479 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RHPN2 protein (Cat# [TP305479]). The protein was produced from HEK293T cells transfected with RHPN2 cDNA clone (Cat# RC205479) using MegaTran 2.0 (Cat# [TT210002]).