

Product datasheet for **RC226353**

PLEKHG4 (NM_001129727) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PLEKHG4 (NM_001129727) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PLEKHG4
Synonyms:	ARHGEF44; PRTPHN1; SCA4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC226353 representing NM_001129727 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAAGGCCCTGGAGAATGGGGATGAGTCCCCAGACTCTCAGGGCCATGCCACCGACTGGAGATTTG
CTGTGTGCAGTTTCAGGGATGCCTGGGAAGAGGAGGAACCTGCTTCCCAGATGCACGTTAAGGACCCAGG
TCCTCCAAGACCACCAGCCGGGGCCACCCAGGATGAGGAGCTACAGGGCAGCCCCCTGTCCAGGAAATTC
CAGTTACCCAGCTGCAGATGAGTCGGGGATGCCAGAGGGGCACAGTAGAAAGCTCCTCAGTCTGT
CAGAAGGGCCAGGCCCTCTGGAGTGGAGAGTCTCCTATGCCCATGTCTCCACCTCAGTTGGCACA
GGGTGAGAGTGACACCCAGGGTAGGGTTGGTAGGGGACCCAGGTCCAAGCAGGGCGATGCCATCTGGC
TTGAGCCCTGGGCATTGGACAGCGACCCTGTGGGCTTGGAGACCCCTTATCAGAAATATCAAAGCTGC
TGGAGGCAGCCCCAGTGGATCCGGCTCCCTAAGCCTGCTGACTGCCTCCTGGCCCAAGACCTCTGTTG
GGAGCTGCTGGCCAGTGGTATGGCCACCTTGCCAGGGACTCGGGATGTCCAAGGCCGGGCAGTGTGCTT
CTGTGTGCCACAGCCAGCCTGGCTTCACTGAGTGCAGCAGCCAGGAACTCATCCGCTCCTGCTGT
ACCTGCGAAGCATCCCCAGGCCGAAGTACAGGCACTGGGACTGACAGTGTAGTTGATGCCGAATTTG
TGCTCCAAGTTCTTCCCTCTTCTGGGCTCAGCCAACACAAGAAGCAGCCCCAGGGCCGTGTACCAG
GTGCTGCTAGTGGGAAGCAGCTGCTGAAGGAAGTGCCTTCCGGGCTGCAGTGGAGCAGTTGCCCTTCTC
AGAGCTGCTGACCCACATCCCAACGGCGGGCTGCCCACTTCGCTAGGAGGAGGCTGCCTTACTGCCA
CCAGGCCCTGGCTGGATTTCCGAAGCGGCTGGAAGCTCTACTACAGAAGTCCAGGCAGCTTGTGCCCTG
CTCCAGGGGGCCATCGAAAGTGTGAAGGCTGTGCCCCAGCCATGGAGCCTGGGAGGTCCGTGCTGCTG
TACAGCAGACAGAGGTCCTGATGCAGCAGGTGCTAGACTCGCCATGGCTGGCATGGCTACAATGCCAGG
GGGCCGGGAGCTGACATGGCTGAAGCAAGAGGTCCAGAGGTGACCTGAGCCAGACTACAGGACGGCA
ATGGACAAGGCTGACGAGCTATATGACCGGTGGATGGATTGCTGCACCAACTGACCTGCAGAGCAACC
AGCGAATACAGGCCCTAGAGTTGGTCCAAACACTGGAGGCCCGGAAAGCGGACTGCACCAGATTGAAGT
GTGGCTGCAGCAGGTGGCTGGCCAGCACTGGAGGAGGCTGGGGAGCCCTCGCTGGACATGCTGCTCCAG



[View online >](#)

GCCCAAGGCTCTTTTCAGGAGCTGTACCAGGTTGCCCAGGAGCAGGTGAGCAAGGGGAGAAGTTTCTGC
AGCCGCTGACTGGCTGGGAGGCGGCTGAACTGGACCCCTGGGGCAGCCTTTCTGGCCCTGCGAGCCCA
GCTGACTGAATCTCTAGGGCTTTGGCCAGCGGTGCCAGCGGCTGGCGGATGCTGAGAGGCTGTTTCAG
CTCTTCAGGGAGGCTTGACGTGGGCTGAGGAGGGGCAGCGAGTGTGGCAGAGCTGGAGCAGGAACGCC
CGGGGTTGTGTTGCAGCAGCTGCAGCTGCACTGGACCAGGCACCCTGACTTGCCCTCTGCCACTTCCG
AAAGATGTGGGCTCTGGCCACGGGGCTGGGCTCAGAGGCCATCCGCCAGGAGTCCGCTGGGCTGGGCG
CGGTGCCAGGACACCTGGCTGGCCCTGGACCAAAGCTTGAGGCTTCACTGAAGCTACCACCGTGGGCA
GCACAGCTAGCCTGTGTGTGAGCCAGGTCCTCCGCTGCACCTGCCACCCTCCCCTGAGGAAGGCCTACAG
CTTCGATCGGAATCTGGGGCAGAGTCTCAGTGAACCTGCCTGCCACTGCCACCATGCGGGCACTATTGCT
GCCTGCCGAGACCAGAGGCTGGAGGAGGTGCCCTGCCCCAGGCATCCCCTACTGTGCCTCCACCAGGCA
GCTCTGACCCAGGAGCCTCAACAGGCTACAGCTGGTGTGGCAGAGATGGTGGCCACGGAGCGGGAGTA
TGTCGGGCTCTAGAGTACACTATGGAGAACTATTTCCCGAGCTGGATCGCCCCGATGTGCCCCAGGGC
CTCCGCGTCAAGCTGCCACCTCTTTGGCAACCTGGAGAAGCTGCGGGACTTCCACTGCCACTTCTTCC
TGCGTGAGCTGGAGGCTGCACCCGGCACCCACAGAGTGGCCTATGCCTTCTGCGCCATAGGGTGCA
GTTTGGGATGTACGCGCTCTACAGCAAGAATAAGCCTCGTCCGATGCCCTGATGTCAAGCTATGGGCAC
ACCTTCTCAAGGACAAGCAGCAAGCACTGGGGGACCACCTGGACCTGGCCTCCTACCTGTAAAGCCCA
TCCAGCGCATGGGCAAGTACGCACTGCTGCTGCAGGAGCTGGCACGGGCCTGCGGGGGCCCCACGAGGA
GCTCAGTGCCTGCGGGAGGCCAGAGCCTTGTGCACTTCCAGCTGCGGCACGGAAACGACCTGCTGGCC
ATGGACGCCATCCAGGGCTGTGATGTTAACCTCAAGGAACAGGGGAGCTGGTGCACAGGATGAGTTTG
TGGTGCCTACTGGGCGCCACAAGTCCGTGCGCCGATCTTCTTTTTGAGGAGCTGCTGCTTTCAGCAA
GCCTCGCCATGGGCCACAGGGGTTGACACATTTGCCTACAAGCGCTCCTTCAAGATGGCAGACCTTGGT
CTCACTGAGTGTGTGGAAACAGCAACCTGCGCTTCGAGATCTGGTTCGCGCCCGCAAGGCCAGGGACA
CCTTTGTGCTGCAGGCCCTCCAGCCTGGCTATCAAGCAGGCTGGACAGCTGACATCTCCACCTGCTTTG
GAGGCAGGCCGTCCACAACAAGGAGGTGCGCATGGCTGAGATGGTGTCCATGGGTGTGGGAAACAAGGCC
TTCGAGACATTGCTCCAGCGAGGAAGCCATCAACGACCGCACCGTCAACTATGTCCTGAAGTGCCGAG
AAGTTCGCTCTCGGGCGTCCATTGCCGTAGCCCGTTTGACCATGACAGCCTCTACCTGGGGCCTCGAA
CTCCCTTCTGGAGACCCTGCCTCTTGTCTGTTCTGGGGTCCCTCAACCTGCACCTGTACAGAGACCCA
GCTCTTCTGGGTCTCCGCTGTCCCTGTATCCAGCTTCCAGAGGAAGCAGCACTGGAGGCTGAGGCAG
AGCTGGGCGGCCAGCCCTCTTTGACTGCTGAGGACTCAGAGATCTCGTCCAATGCCATCAGCCAGTGG
CTCCAGTGGCTCTGACAGCAGCTGTGTGTGAGGGCAGGCCCTGGGTAGGGGCTGGAGGACTTACCCTGT
GTC

ACGCGTACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC226353 representing NM_001129727
 Red=Cloning site Green=Tags(s)

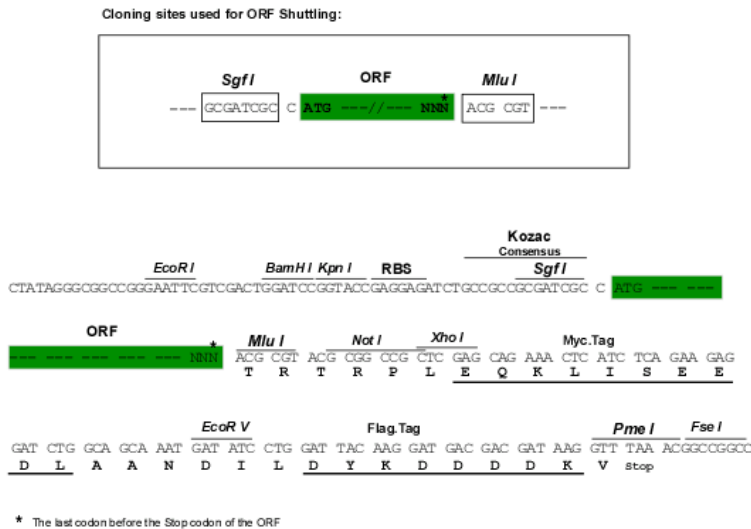
```
MERPLENGDESPDSQGHATDWRFAVCSFRDAWEEEEEPASQMHVKDPGPPRPPAGATQDEELQGSPLSRKF
QLPPAADESGDAQRGTVESVSSVLESGPGPSGVESELLCPMSSHLSLAQGESDTPGVGLVGDPPSRAMP
LSPGALSDPVGGLDPLSEISKLEAAPSGSGLPKPADCLLAQDLCWELLASGMATLPGTRDVGRAVLL
LCAHSPAWLQSECSSQELIRLLLYLRSIPRPEVQALGLTVLVDARICAPSSSLFSGLSQLQEAAPGAVYQ
VLLVVGSTLLKEVPSGLQLEQLPSQSLLTHIPTAGLPTSLGGGLPYCHQAWLDFRRREALLQNCQAACAL
LQGAIESVKAVPQPMPEGEVQQLLQQTVEVLMQQVLDSPWLAWLQCQGGRELTLWKQEVPEVTLSPDYRTA
MDKADELVDYRVDGLLHQLTLQSNQRIQALELVQTLQEAESGLHQIEVWLQVQVWPALEEAGEPSLDMLLQ
AQGSFQELQVAQEQVRQGEKFLQPLTGWEAAELDPPGARFLALRAQLTEFSRALAQRCQLADAERLFQ
LFREALTWAEEGQVRLAELEQERPGVVLQQLQLHWTRHPDLPPAHRKMWALATGLGSEAIRQECRWAWA
RCQDTWLALDQKLEASLKLPPVGSTASLCVSVQVPAAPAHPLRKAYSFDRNLGQSLSEPACHCHAATIA
ACRRPEAGGGALPQASPTVPPPSSDPRSLNRLQLVLAEMVATEREYVRALEYTMENYFPELDRDPVQPG
LRGQRAHLFGNLEKLRDFHCHFRLRELEACTRHPPRVAYAFLRHRVQFGMYALYSKNKPRSDALMSSYGH
TFFKDKQALGDHLDLASYLLKPIQRMGKYALLLQELARACGGPTQELSALREAQSLVHFQLRHGNDLLA
MDAIQGGCVNLKEQQLVRQDEFVVRTGRHKSRRIFLFEELLLFSKPRHGPTGVDTFAYKRSFKMADLG
LTECCGNLRFEIWFRRRKARDTFVLQASSLAIKQAWTADISHLWRQAVHNKEVRMAEMVSMGVGNKA
FRDIAPSEEAINDRTVNYVLKCREVRSRASIAPFDHDSLVLGASNSLPGDPASC SVLGSLLNHLRYDP
ALLGLRCLPLYSPFEEAALEAEELGGQPSLTAEDSEISSQCPSASGSSGSDSSCVSGQALGRGLEDLPC
V
```

TRTRPLEQKLISEEDLAANDILDYKDDDDK

Chromatograms: https://cdn.origene.com/chromatograms/mk8103_b08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

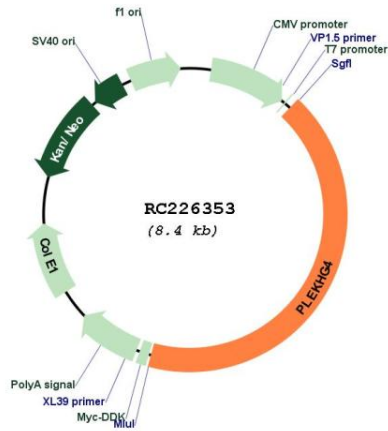


ACCN: NM_001129727

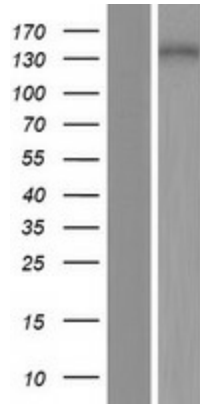
ORF Size: 3573 bp

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.
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:	NM_001129727.3
RefSeq Size:	4606 bp
RefSeq ORF:	3576 bp
Locus ID:	25894
UniProt ID:	Q58EX7
Cytogenetics:	16q22.1
MW:	130.8 kDa
Gene Summary:	The protein encoded by this gene can function as a guanine nucleotide exchange factor (GEF) and may play a role in intracellular signaling and cytoskeleton dynamics at the Golgi apparatus. Polymorphisms in the region of this gene have been found to be associated with spinocerebellar ataxia in some study populations. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2015]

Product images:



Circular map for RC226353



Western blot validation of overexpression lysate (Cat# [LY427036]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC226353 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).