

Product datasheet for **RC226331**

PLEKHG4 (NM_001129731) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: PLEKHG4 (NM_001129731) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: PLEKHG4
Synonyms: ARHGEF44; PRTPHN1; SCA4
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC226331 representing NM_001129731
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGGAAGGCCCTGGAGAATGGGGATGAGTCCCAGACTCTCAGGGCCATGCAACCGACTGGAGATTTG
CTGTGTGCAGTTTCAGGGATGCCTGGGAAGAGGAGGAACCTGCTTCCCAGATGCACGTTAAGGACCCAGG
TCCTCCAAGACCACCAGCCGGGGCCACCCAGGATGAGGAGCTACAGGGCAGCCCCCTGTCCAGGAAATTC
CAGTTACCCCACTGCAGATGAGTCGGGGATGCCAGAGGGGCACAGTAGAAAGCTCCTCAGTCTGT
CAGAAGGGCCAGGCCCTCTGGAGTGGAGAGTCTCCTATGCCCATGTCTCCCACCTCAGCTTGGCACA
GGGGACTCGGGATGTCCAAGGCCGGCAGTGTCTTCTGTGTGCCACAGCCAGCCTGGCTTCAGTCT
GAGTGCAGCAGCCAGGAATCATCCGCCTCTGTGTACCTGCGAAGCATCCCCAGGCCGAAGTACAGG
CACTGGGACTGACAGTGTAGTTGATGCCGAATTTGTGCTCCAAGTTCTTCCCTCTTCTGGGCTCAG
CCAACAACAAGAAGCAGCCCCAGGGCCGTGTACCAGGTGCTGTAGTGGGAAGCAGCTGTGAAGGAA
GTGCCCTCCGGGCTGCAGCTGGAGCAGTTGCCTTCTCAGAGCTGTGACCCACATCCCAACGGCGGGC
TGCCCACTTCGCTAGGAGGAGGCTGCCTTACTGCCACCAGGCCCTGGCTGGATTTCCGAAGCGGCTGGA
AGCTCTACTACAGAAGTGCAGGAGCTTGTGCCCTGCTCCAGGGGCCATCGAAAGTGTGAAGGCTGTG
CCCCAGCCATGGAGCCTGGGGAGTTCGGTTCAGCTGTACAGCAGACAGAGGTCCTGATGCAGCAGGTGC
TAGACTCGCCATGGCTGGCATGGCTACAATGCCAGGGGGCCGGGAGCTGACATGGCTGAAGCAAGAGGT
CCCAGAGGTGACCCTGAGCCAGACTACAGGACGGCAATGGACAAGGCTGACGAGCTATATGACCGGGTG
GATGGATTGTGCACCAACTGACCCTGCAGAGCAACCAGCAATACAGGCCCTAGAGTTGGTCCAAACAC
TGGAGGCCCGGAAAGCGGACTGCACCAGATTGAAGTGTGGCTGCAGCAGGTGGGCTTCCAGCACTGGA
GGAGGCTGGGGAGCCCTCGCTGGACATGCTGCTCCAGGCCAAGGCTCTTTTCAGGAGCTGTACCAGTT
GCCAGGAGCAGGTGAGCAAGGGGAGAAGTTTCTGCAGCGCTGACTGGCTGGGAGGCGGCTGAACTGG
ACCCCCCTGGGGCAGCTTTCTGGCCCTGCGAGCCAGCTGACTGAATTCCTAGGGCTTTGGCCAGCG
GTGCCAGCGGCTGGCGGATGCTGAGAGGCTGTTTCAGCTCTTCAGGGAGGCTTACAGTGGGCTGAGGAG
GGGCGAGGAGTGTGGCAGAGCTGGAGCAGGAACGCCCGGGGTTGTGTTGCAGCAGCTGCAGCTGCACT



GGACCAGGCACCCTGACTTGCCCTCTGCCACTTCCGAAAGATGTGGGCTCTGGCCACGGGGCTGGGCTC
 AGAGGCCATCCGCCAGGAGTGCCGCTGGGCTGGGCGCGGTGCCAGGACACCTGGCTGGCCCTGGACAA
 AAGCTTAGGGTTCACTGAAGCTACCACCGGTGGGCAGCACAGCTAGCCTGTGTGTGTCAGCCAGGTCCCCG
 CTGCACCTGCCACCCTCCCCTGAGGAAGGCTACAGTTCGATCGGAATCTGGGGCAGAGTCTCAGTGA
 ACCTGCCTGCCACTGCCACCATGCGGCCACTATTGCTGCCTGCCGAGACCAGAGGCTGGAGGAGGTGCC
 CTGCCCCAGGCATCCCCTACTGTGCCTCCACCAGGCAGCTGACCCCAGGAGCCTCAACAGGCTACAGC
 TGGTGTGGCAGAGATGGTGGCCACGGAGCGGGAGTATGTCGGGCTCTAGAGTACACTATGGAGAATA
 TTTCCCCGAGCTGGATCGCCCCGATGTGCCCCAGGGCCTCCGCGGTGACGGTGCCACCTCTTTGGCAAC
 CTGGAGAAGCTGCGGGACTTCCACTGCCACTTCTTCTGCGTGAGCTGGAGGCTTGCACCCGGCACCCAC
 CACGAGTGGCCTATGCCTTCTGCGCCATAGGGTGCAGTTTGGATGTACGCGCTCTACAGCAAGAATAA
 GCCTCGTCCGATGCCCTGATGTCAAGCTATGGGCACACCTTCTTCAAGGACAAGCAGCAAGCACTGGGG
 GACCACCTGGACCTGGCCTCCTACCTGCTAAAGCCATCCAGCGCATGGGCAAGTACGACTGCTGCTGC
 AGGAGCTGGCACGGGCTGCGGGGGCCCCACGCAGGAGCTCAGTGCCTGCGGGAGGCCAGAGCCTTGT
 GCACTTCCAGCTGCGGCACGAAACGACCTGCTGGCCATGGACGCCATCCAGGGTGTGATGTTAACCTC
 AAGGAACAGGGGAGCTGGTGCACAGGATGAGTTTGTGGTGCAGCTGGGCGCCACAAGTCCGTGCGCC
 GCATCTTCTTTTTGAGGAGCTGCTGCTTTCAGCAAGCCTCGCCATGGGCCACAGGGGTGACACATT
 TGCTTACAAGCGCTCCTTCAAGATGGCAGACCTTGGTCTCACTGAGTGTGTGGGAACAGCAACCTGCGC
 TTCGAGATCTGGTTCGCGGGCCGAAGGCCAGGGACACCTTTGTGCTGCAGGCTCCAGCCTGGCTATCA
 AGCAGGCTGGACAGTGACATCTCCACCTGCTTTGGAGGCAGGCCGTCCACAACAAGGAGGTGCGCAT
 GGCTGAGATGGTGTCCATGGGTGTGGGAAACAAGGCCCTCCGAGACATTGCTCCAGCGAGGAAGCCATC
 AACGACCCACCGTCAACTATGCTCTGAAGTCCGAGAAGTTCGCTCTCGGGCGTCCATTGCCGTAGCCC
 CGTTTGACCATGACAGCCTTACCTGGGGCCTCGAACTCCCTTCTGGAGACCTGCTTCTGCTGTATCCC
 TCTGGGTCCCTCAACCTGCACCTGTACAGAGACCCAGCTTCTTGGGTCTCCGCTGTCCCCTGTATCCC
 AGCTTCCAGAGGAAGCAGCACTGGAGGCTGAGGCAGAGCTGGGCGGCCAGCCCTTTTGAAGTGTGAGG
 ACTCAGAGATCTCGTCCAATGCCATCAGCCAGTGGCTCCAGTGGCTCTGACAGCAGCTGTGTGTCAGG
 GCAGGCCCTGGTGGGGCTGGAGGACTTACCCTGTGTC

ACGCGTACGCGGGCCGTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC226331 representing NM_001129731
 Red=Cloning site Green=Tags(s)

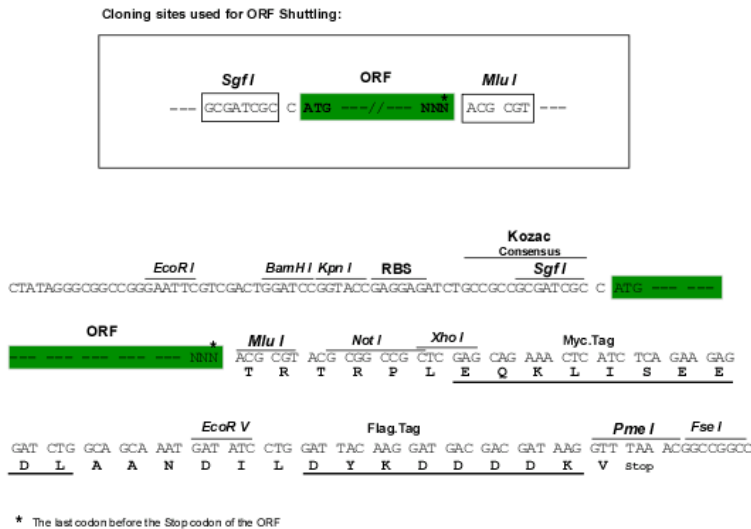
MERPLENGDESPDSQGHATDWRFAVCSFRDAWEEEEPASQMHVKDPGPPRPPAGATQDEELQGSPLSRKF
 QLPPAADESGDAQRTVESSSVLSEPGPSGVESLLCPMSSHLAQQGTRDVQGRAVLLCAHSPAWLQS
 ECSSQELIRLLL YLRSIPRPEVQALGLTVLVDARICAPSSSLFSGLSQLQEAAPGAVYQVLLVGSTLLKE
 VPSGLQLEQLPSQSLLTHIPTAGLPTSLGGGLPYCHQAWLDFRRRLEALLQNCQAACALLQGAIESVKAV
 PQPMEPGEVQQLLQTEVLMQQVLDSPWLAWLQCQGGRELTLWKQEVPEVTLSPDYRTAMDKADEL YDRV
 DGLLHQLTLQSNQRIQALELVQTEARESLHQIEVWLQQVGLPALEEAGEPSLDMLLQAQGSFQELYQV
 AQEQVRQGEKFLQPLTGWEAAELDPPGARFLALRAQLTEFSRALAQRCQRLADAERLFQLFREALTWAEE
 GQRVLAELAEQERPGVVLQQLHLWTRHPDLPPAHRKMWALATGLGSEAIRQEERAWARQDWTWALDQ
 KLEASLKLPPVGSTASLQVPAAPAHPLRKAYSFDRNLGQSLSEPACHCHAATIAACRRPEAGGGA
 LPQASPTVPPGSSDPRSLNRLQLVLAEMVATEREYVRALEYTMENYFPELDRPDVQGLRGQRAHLFGN
 LEKLRDFHCHFFLRELEACTRHPPRVAYAFLRHRVQFGMYALYSKNKPRSDALMSSYGHTFFKDKQALG
 DHLDLASYLLKPIQRMGKYALLLQELARACGGPTQEL SALREAQSLVHFQLRHGNDLLAMDALIQGCDVNL
 KEQQGLVRQDEFVVRTGRHKSVRRIFLFEELLLFSKPRHGPTGVDTFAYKRSFKMADLGLTECCGNSNLR
 FEIWFGRKARDTFVLQASSLAIKQAWTADI SHLLWRQAVHNKEVRMAEMVSMGVGNKAFRDIAPSEEA
 NDRTVNYVLKCREVRSRASI AVAPFDHDSL YLGASNSLPGDPASC SVLGS LNLHL YRDPALLGLRCPLYP
 SFPEEALEAEALGGQPSLTAEDSEISSQCPASGSSGSDSSCVSGQALGRGLEDLPCV

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

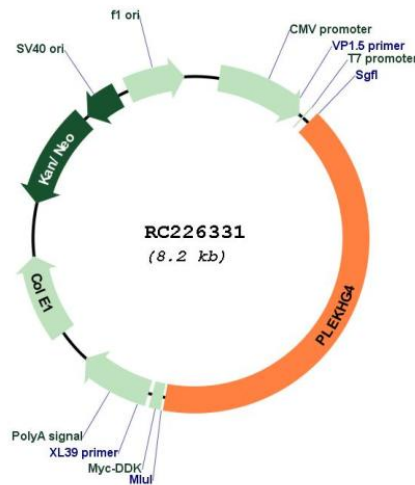
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001129731

ORF Size: 3330 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:	<u>NM_001129731.3</u>
RefSeq ORF:	3333 bp
Locus ID:	25894
UniProt ID:	<u>Q58EX7</u>
Cytogenetics:	16q22.1
MW:	122.7 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]