

## Product datasheet for RC216295

### KALRN (NM\_003947) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	KALRN (NM_003947) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KALRN
Synonyms:	ARHGEF24; CHD5; CHDS5; DUET; DUO; HAPIP; TRAD
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC216295 representing NM_003947 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGACGGACCGCTTCTGGGACCAGTGGTATCTCTGGTATCTCCGCTTGTCCGGCTGCTGGATCGAGGGT  
CTTTTCGGAATGATGGTTTGAAGCTTCTGATGTCCTTCTATCCTAAAGGAAAAGTGGCCTTCGTGTC  
TGGGGTTCGTGATAAGCGAGGCGGACCCATCCTGACCTTCCCTGCTCGCAGCAATCATGACAGAATAAGA  
CAGGAAGACCTGCGGAACTCGTGACGTATTTGGCCAGCGTGCCAAGTGAGGACGTGTGCAAACGTGGCT  
TCACTGTCATCATCGACATGCGGGGCTCCAAGTGGGACCTCATCAAGCCCTCCTCAAAACGCTGCAGGA  
AGCCTTTCCAGCTGAGATCCATGTGGCCCTCATCATTAAACCCGACAACCTTCTGGCAGAAACAGAAGACC  
AACTTTGGCAGCTCCAAATTCATCTTTGAGACGAGCATGGTATCTGTGGAGGGCCTCACAAAGCTGGTGG  
ACCCCTCCAGCTGACGGAGGAGTTTGTGGCTCCCTGGACTACAACCATGAGGAGTGGATCGAACTGCG  
GCTCTCCCTGGAGGAGTTCTTCAACAGCGCCGTGCACCTGCTCTCGCGCCTCGAGGACCTCCAGGAGATG  
CTAGCCCCGAAGGAGTTTCTGTGGATGTGGAGGGCTCTCGCGGCTCATTGACGAACACACACAGCTCA  
AGAAAAAGGTGCTGAAGGCCCTGTGGAGGAGCTGGACCGGAGGGGCGAGCGGCTGCTGCAGTGCATCCG  
CTGCAGCGACGGCTTCTCAGGACGCAACTGCATCCCGGGCAGTGTGACTTCCAGAGCCTGGTCCCAAG  
ATCACCAGTCTCCTGGACAAGCTGCACTCCACCCGGCAGCACCTGCACCAGATGTGGCATGTGCGCAAGC  
TCAAGCTGGACAGTGTCTTTCAGCTGCGGCTCTTCGAGCAGGATGCTGAGAAGATGTTTACTGGATAAG  
CCACAACAAGGAGTTATTCCTCCAGAGCCACACGGAGATCGGAGTCAAGTACCAGTACGCCCTTGACCTC  
CAGACGCAGCACAATCACTTTGCCATGAACTCCATGAATGCCTATGTCAACATCAACCGCATCATGTCCG  
TGGCTTCCCGCTCTCTGAGGCCGGTCAATATGCCTCACAACAAATCAAGCAGATCTCCACCCAGCTGGA  
CCAGGAGTGAAGAGCTTCGCTGCTGCCCTGGATGAACGCAGCACCATCCTCGCCATGTCTGCTGTGTT  
CACCAGAAGGCTGAGCAGTTCCTGTGCGGAGTGGATGCCTGGTGAAGATGTGCAGTGAAGTGGTCTGC  
CATCCGAGATGCAAGACCTAGAGCTGGCAATCCACCACCAGACCTTGTATGAGCAGGTGACCCAAGC  
CTACACAGAGGTGAGCCAGGATGGCAAAGCACTACTTGTATGTGCTGCAGCGGCCCTGAGCCCTGGGAAC  
TCCGAATCCCTACGGCCACAGCCAACCTACTCCAAGGCAGTGCACCAGGTGCTGGACGTGGTGCATGAGG



TGTTACATCACCAGCGACGGCTGGAGAGCATCTGGCAGCACCGCAAGGTGCGGCTCCACCAGCGGCTGCA  
 GCTCTGCGTCTTCCAGCAGGATGTACAGCAGGTGTTGGACTGGATTGAAAACCATGGTGAGGCTTTCTC  
 AGCAAACACACTGGAGTTGGGAAGTCCCTACATCGAGCCCGGCCCTGCAGAAGAGGCATGATGACTTTG  
 AAGAGGTGGCTCAGAATACGTACACCAATGCGGACAAGCTCCTAGAAGCAGCAGAGCAGTTGGCTCAGAC  
 GGGGGAATGTGACCCCGAGGAGATCTACAAGGCAGCTCGACACCTGGAGGTGCGCATCCAAGACTTCGTG  
 CGCAGGGTGGAGCAGCGGAAGCTTCTCCTGGACATGTCTGTTTCCTTCCACACACACCAAAAGAGTTGT  
 GGACATGGATGGAAGACCTTCAGAAGGAGATGTTGGAGGATGTCTGTGCAGATTCTGGATGCAGTCCA  
 GGAACTGATCAAGCAGTTCAGCAGCAGACAGACCGCCACTCTAGATGCCACACTCAATGTATCAAGGAA  
 GGCGAAGACCTTATCCAGCAGCTCAGGTGAGCGCCTCCCTCCCTCGGGGAGCCAGCGAGGCCAGGGACT  
 CGGCTGTGTCCAACAACAAAACACCCACAGCAGCTCCATCAGCCACATCGAGTCGGTCTCTGCAGCAGCT  
 TGATGATGCCAGGTGCAGATGGAGGAGCTGTTCCAGCAGCGGAAGATCAAGCTGGACATCTTCTGCAA  
 CTGCGCATCTTTGAGCAGTACACCATCGAGGTGACAGCAGAGCTAGACGCCTGGAATGAAGACTTGCTTC  
 GGCAGATGAATGACTTCAACACAGAGGACCTAACCTGGCAGAACAGCGGCTGCAGCGCCACACAGAACG  
 GAAGCTAGCCATGAACAACATGACCTTTGAGGTTATCCAGCAGGGACAGGATCTGCACCAGTACATCAGG  
 GAGGTCCAGGCATCAGGAATTGAGTTGATCTGTGAAAAAGACATTGATCTGGCAGCCAGGTGCAAGAGT  
 TATTGGAATTTCTCCATGAGAAGCAGCATGAATTGGAGCTCAATGCAGAGCAGACTCATAAGCGGCTAGA  
 GCAGTGCCTCAATTACGTCACCTCCAGGCTGAAGTCAAACAGGTTCTGGGATGGATCCGCAATGGAGAG  
 TCAATGCTCAACGCCAGCCTGGTCAATGCCAGCTCTTTGTGCGAAGCAGAGCAGCTGCAGCGGGAGCACG  
 AGCAGTTCCAACTGGCCATCGAGTCCCTCTTTCATGCCACTTCTTGCAGAAGACGCCACAGAGTGCCTT  
 GCAGGTACAGCAGAAAGCCGAGGTGCTGCTCCAGGCCGGCCACTACGATGCCGATGCCATCCGGGAATGT  
 GCTGAGAAGGTGGCCCTCACTGGCAGCAGCTCATGCTGAAGTGAAGACCGGCTAAAATTGGTCAATG  
 CCTCTGTGGCCTTTACAAAACCTTCTGAACAGGTGTGTAGTGTCTGGAGAGCTTAGAGCAAGAATACCG  
 GAGAGATGAGGACTGGTGTGGTGGACGAGATAAGCTGGGGCCAGCAGAGATCGACCATGTCTATTCCC  
 CTATCAGCAAACATTTGGAACAAAAGGAGGCCTTTCTTAAGGCCTGCACCCTGGCTCGGCGGAATGCTG  
 AGGTGTTTCTCAAGTACATCCACAGGAACAACGTGAGCATGCCAGTGTGCGCAGCCACACTCGGGGACC  
 CGAGCAACAAGTGAAGCCATCTGAGTGAAGTCTGTCAGAGGGAGAATCGCGTGTGCTTCTGGACC  
 TTGAAGAAGCGCGGTTAGACCAATGCCAGCAATATGTGGTGTTCGAGCGCAGCGCTAAGCAGGCGCTTG  
 ACTGGATCCAAGAAACAGGTGAATTTACCTCTCAACACATACCTCCACTGGAGAGACCACAGAGGAGAC  
 TCAGGAACTGCTGAAAGAATATGGGGAATTCAGGGTGCCTGCCAAGCAAACAAGGAGAAGGTGAAGCTT  
 CTGATTCAGCTGGCCGATAGCTTTGTGAAAAAGGCCACATTCATGCCACGGAGATAAGGAAATGGTGGA  
 CCACGGTGGACAAGCACTACAGAGATTTCTCCCTGAGGATGGGAAAGTACCGATACTCACTGGAGAAAGC  
 CCTAGGAGTCAACACAGAGGATAAATAAGGACCTGGAGCTGGATATTATCCAGCAAAGCCTTTTCGGATCGG  
 GAGGTCAAGCTGCGGGACGCCAACCCACGAAGTCAATGAAGAGAAGCGGAAGTCAAGCCGGAAGAAAGAAT  
 TTATTATGGTGAAGTACTCCAGACAGAGAAGGCTTATGTAAGGGATTTGCATGAGTGTCTTAGAGACCTA  
 CCTGTGGGAAATGACCAGTGGTGTGGAGGAGATCCCCCTGGGATCCTCAATAAAGAGCATATCATCTTT  
 GGCAACATCCAAGAGATCTACGATTTCCATAACAACATCTTCTCAAAGAGCTGGAGAAGTACGAGCAAC  
 TGCTGAGGATGTGGGACACTGCTTTGTACCTGGGCAGACAAATTTAGATGTATGTACCTACTGTAA  
 AAACAAGCCTGATCCAACAGCTTATCCTGGAGCATGCGGGCACCTTCTTTGATGAGATAACAACAGCGG  
 CATGGTCTGGCCAACTCCATCTCTCTACCTAATTAAGCCTGTCCAAAGGATCACCAAAATCAACTGC  
 TCCTGAAGGAACCTTTAACTTGCTGTGAAGAAGGAAAAGGGGAGCTCAAGGATGGCTGGAGGTGATGCT  
 CAGTGTCCCAAAGAAAGCCAATGATGCCATGCATGTCAGCATGCTGGAAGGGTTCGACGAGAACCTGGAT  
 GTGACGGGGAGTTGATTCTCCAGGATGCCTTTCAAGTGTGGACCCGAAGTCGCTGATCCGGAAGGGGC  
 GGGAGCGGCACTTGTCTCTTTGAGATCTCCTTGGTTTTAGCAAGGAGATCAAAGATTCTCAGGACA  
 CACGAAATATGTTTACAAGAACAAGCTACTGACCTCAGAGCTGGGTGTGACCGAGCACGTGGAGGGCGAT  
 CCCTGCAAATTCGCTTGTGGTCTGGGCGCACCCATCCTCAGACAATAAAACAGTGTGAAAGCCTCCA  
 ACATTGAAACCAAGCAGGAGTGGATCAAGAACATTCGAGAAGTGATTCAAGAAAGGATCATTACCTGAA  
 AGGAGCTTTAAAGGAGCCACTTCAGCTCCCCAAAACACCAGCCAAACAGAGGAACAATAGTAAGAGGGAT  
 GGAGTGGAGGATATTGACAGCCAGGGGGATGGGAGCAGCCAACCAGACCCATCTCCATTGCTTCTAGGA  
 CCTCTCAGAACACAGTGGACAGTGACAAGGATGGCAACCTTGTCTCGGTGGCACCTGGGACCTGGAGA  
 TCCTTTCTCCACTTACGTT

ACGCGTACGCGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC216295 representing NM\_003947  
 Red=Cloning site Green=Tags(s)

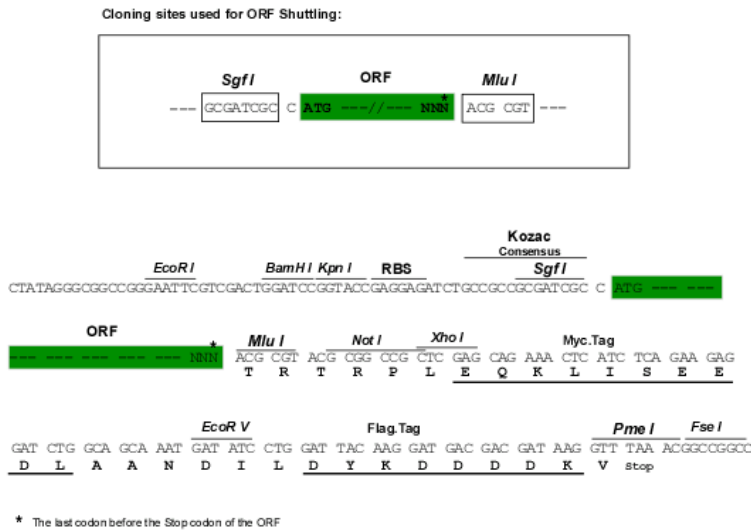
MTDRFWDQWYLWYLRLLRLLDRGSFRNDGLKASDVLPILEKVAFVSGGRDKRGGPILTFPARSNHDRIR  
 QEDLRKLVTYLASVPSEDEVCKRGFTVIIDMRGSKWDLIKPLLKTLQEAFPAEIHVALIIPDNFVQKQKT  
 NFGSSKIFETSMSVSEGLTKLVDPSTLTFEFDGSLDYNHEEWIELRSLSEEFFNSAVHLLSRLEDLQEM  
 LARKEFPVDVEGSRRLIDEHTQLKKKVLKAPVEELDREGQRLQCIRCSDFSGRNCIPGSADFQSLVPK  
 ITSLDLKHLSTRQHLHQMWHVRKLLDQCFQLRLEQDAEKMFWDWISHNKELFLQSHTEIGVSYQYALDL  
 QTQHNHFAMNSMAYVNIINRIMSVASRLSEAGHYASQQIKQISTQLDQEWKSFAAALDERSTILAMSAVF  
 HQKAEQFLSGVDAWCKMCSEGLPSEMQLLELAHHHQTLYEQVTQAYTEVSQDGKALLDVLQRPLSPGN  
 SESLTATANYSKAVHQVLDVVHEVLHHQRRLSEIWHQHRKVRHLHQRLLQCVFQQDVQVLDWIENHGEAFL  
 SKHTGVGKSLHRARALQKRHDDFEVAQNTYTNADKLEAAEQLAQTGECDPEEIKYKAARHLEVRIQDFV  
 RRVEQRKLLLDMSVSFHTHTKELWTWMDLQKEMLEDCADSDAVQELIKQFQQQTATLDATLNVIKE  
 GEDLIQQLRSAPPSLGEPSEARDSAVSNKTPHSSSISHIESVLQQLDDAQVQMEELFHERKIKLDIFLQ  
 LRIFEQYTIIEVTAELDAWNEDLLRQMDFNTEDLTLAEQRLQRHTERKLANMNTFEVIQQGDLHQYIT  
 EVQASGIELICEKDIDLAAQVQELLEFLHEKQHELELNAEQTHKRLQCLQLRHLQAEVKQVLGWIRNGE  
 SMLNASLVNASSLSEAEQLQREHEQFLAIESLFHATSLQKTHQSALQVQKAEVLLQAGHYDADAIREC  
 AEKVALHWQQLMLKMEDRLKLVNASVAFYKTSEQVCSVLESLEQYRRDEDWCGGRDKLGPAAEIDHVIP  
 LISKHLEQKEAFLKACTLARRNAEVFLKYIHRNNVSMPSVASHTRGPEQQVKAILSELLQRENRLHFWT  
 LKKRRLDQCQQYVVFERSAKQALDWIQETGEFYLSHTSTGETTEETQELLKEYGEFRVPAKQTKKVKL  
 LIQLADSFVEKGHIHATEIRKWWTTVDKHYRDFSLRMGKYRYSLEKALGVNTEDNKDLELDIIPASLSDR  
 EVKLRDANHEVNEEKRSARKKEFIMAELLQTEKAYVRDLHECLETYLWEMTSVVEEIPPGILNKEHIF  
 GNIQEIYDFHNNIFLKELEKYEQLPEDVGHCFVTWADKFMVYTYCKNPKDSNQLILEHAGTFFDEIQQR  
 HGLANSISSYLKPVQRITKYQLLLKELLTCCEEGKGLKDGLEVMLVSPKKANDAMHVSMLGFDENLD  
 VQGELILQDAFQVDPKSLIRKGRERHLFLFEISLVFSKEIKDSSGHTKYVYKNNKLLTSELGVTEHVEGD  
 PCKFALWSGRTPSSDNKTVLKASNIETKQEWIKNIREVIQERIHLKLGALKEPLQLPKTPAKQRNNSKRD  
 GVEDIDSQGDGSSQPDTSIASRTSQNTVSDSKDGNL VPRWHLGPGDPFSTYV

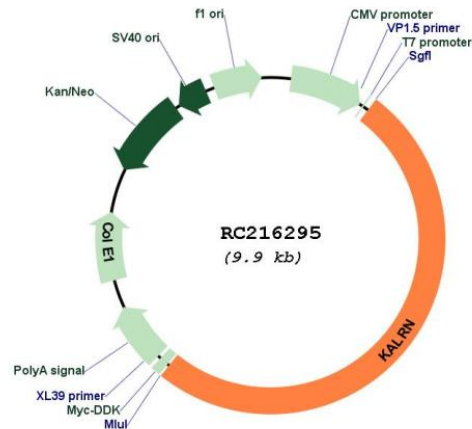
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**



**Plasmid Map:**


**ACCN:** NM\_003947

**ORF Size:** 4989 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:**

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\\_003947.6](#)

**RefSeq Size:** 6524 bp

**RefSeq ORF:** 4992 bp

**Locus ID:** 8997

**UniProt ID:** [O60229](#)  
**Cytogenetics:** 3q21.1-q21.2  
**Domains:** RhoGEF, SEC14, PH, spectrin  
**Protein Families:** Druggable Genome, Protein Kinase  
**MW:** 192.2 kDa

**Gene Summary:** Huntington's disease (HD), a neurodegenerative disorder characterized by loss of striatal neurons, is caused by an expansion of a polyglutamine tract in the HD protein huntingtin. This gene encodes a protein that interacts with the huntingtin-associated protein 1, which is a huntingtin binding protein that may function in vesicle trafficking. [provided by RefSeq, Apr 2016]