

Product datasheet for **RC202189**

KEAP1 (NM_203500) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KEAP1 (NM_203500) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KEAP1
Synonyms:	INrf2; KLHL19
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC202189 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGACGCCAGATCCCAGGCTAGCGGGCTGGGGCTGCTGCCGATTCTGCCCTGCAGTCACAGTGCC
 CTGAGGGGGCAGGGGACGCGGTGATGTACGCCTCCACTGAGTGAAGCGGAGGTGACGCCCTCCAGCA
 TGGCAACCGCACCTTCAGCTACACCCTGGAGGATCATACCAAGCAGGCCTTTGGCATCATGAACGAGCTG
 CGGCTCAGCCAGCAGCTGTGTGACGTCACACTGCAGGCAAGTACCAGGATGCACCGGCCGCCAGTTCA
 TGGCCACAAGGTGGTGTGGCCTCATCCAGCCCTGTCTTCAAGGCCATGTTACCAACGGGCTGCGGGA
 GCAGGGCATGGAGGTGGTGTCCATTGAGGGTATCCACCCAAGGTCATGGAGCGCCTCATTGAATTCGCC
 TACACGGCCTCCATCTCCATGGGCGAGAAGTGTGTCTCCACGTCATGAACGGTGTGTATGTACCAGA
 TCGACAGCGTTGTCGGTGCCTGCAGTGACTTCTGGTGCAGCAGCTGGACCCAGCAATGCCATCGGCAT
 CGCCAACCTCGCTGAGCAGATTGGCTGTGTGGAGTTGCACCAGCGTGCCCGGGAGTACATCTACATGCAT
 TTTGGGGAGGTGGCCAAGCAAGAGGAGTTCTTCAACCTGTCCACTGCCAAGTGGTACCCTCATCAGCC
 GGGACGACCTGAACGTGCGCTGCGAGTCCGAGGCTTCCACGCCTGCATCAACTGGGTCAAGTACGACTG
 CGAACAGCGACGGTTCTACGTCCAGGCGCTGCTGCGGGCCGTGCGCTGCCACTCGTTGACGCCAAGTTC
 CTGCAGATGCAGCTGCAGAAAGTGCAGATCCTGCAGTCCGACTCCCGCTGCAAGGACTACCTGGTCAAGA
 TCTTCGAGGAGCTCACCTGCACAAGCCACGCAGGTGATGCCCTGCCGGGCGCCCAAGTGGGCGGCT
 GATCTACACCGCGGGCGGCTACTCCGACAGTCGCTCAGTACCTGGAGGCTTACAACCCAGTACGCGC
 ACCTGGCTCCGGTTGGCGGACCTGCAGGTGCCCGGAGCGGCCTGGCCGGCTGCGTGGTGGGCGGCTGT
 TGTACGCCGTGGGCGGCAGGAACAACCTGCCCGACGGCAACACCGACTCCAGCGCCCTGGACTGTTACAA
 CCCCATGACCAATCAGTGGTCGCCCTGCCGCCCATGAGCGTGCCCGTAACCGCATCGGGTGGGGGTC
 ATCGATGGCCACATCTATGCCGTGCGCGCTCCACGGTGCATCCACCACAACAGTGTGGAGAGGTATG
 AGCCAGAGCGGGATGAGTGGCACTTGGTGGCCCAATGCTGACACGAAGGATCGGGTGGGCGTGGCTGT
 CCTCAATCGTCTCCTTTATGCCGTGGGGGCTTTGACGGGACAAACCGCCTTAATTCAGTGTGATTTAC
 TACCCAGAGGAACGAGTGGCGAATGATCACAGCAATGAACACCATCCGAAGCGGGCAGGCGTCTGCC
 TCCTGCACAACGTATCTATGCTGCTGGGGCTATGATGGTCCAGGACCAGCTGAACAGCGTGGAGCGCTA
 CGATGTGGAACAGAGACGTGGACTTTCGTAGCCCCATGAAGCACCGGGAAGTGCCTGGGGATCACT
 GTCCACCAGGGGAGAATCTACGTCTTGGAGGCTATGATGGTACACGTTCTGGACAGTGTGGAGTGT
 ACGACCCAGATACAGACCTGGAGCGAGGTGACCCGAATGACATCGGGCCGAGTGGGGTGGGCGTGGC
 TGTCCACATGGAGCCCTGCCGAAGCAGATTGACCAGCAGAACTGTACCTGT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC202189 protein sequence
 Red=Cloning site Green=Tags(s)

MQPDRPSGAGACRFLPLQSQCEPAGDAVMYASTECKAEVTPSQHGNRTFSYTLIEDHTKQAFGIMNEL
 RLSQQLCDVTLQVKYQDAPAAQFMAHKVVLASSPVFKAMFTNGLREQGMEVVSIEGIHPKVMERLIEFA
 YTASISMGEKCVLHVMNGAVMYQIDSVVRACSDFLVQQLDPSNAIGIANFAEQIGCVLHQRAREYIYMH
 FGEVAKQEEFFNL SHCQLVTLISRDDLNVRCSEVVFHACINWVKYDCEQRRFYVQALLRAVRCHSLTPNF
 LQMQLQKCEILQSDSRCKDYLVKIFEELTLHKPTQVMPCRAPKVGRLIYTAGGYFRQSLSYLEAYNPSDG
 TWLRLADLQVPRSLAGCVVGGLLYAVGGRNNSPDGNTDSSALDCYNPMTNQWSPCAPMSVPRNRIGVGV
 IDGHIYAVGGSHGCIHHNSVERYEPERDEWHLVAPMLTRRIGVGVAVLNRLLYAVGGFDGNTNLSAECY
 YPERNEWRMITAMNTIRSGAGVCVLHNCIYAAGGYDGDQQLNSVERYDVETETWTFVAPMKHRRSALGIT
 VHQGRIYVLGGYDGHFTFLDSVECYDPTDTWSEVTRMTSGRSGVGVAVTMEPCRKQIDQQNCTC

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6307_c12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_203500

ORF Size: 1872 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_203500.2](#)

RefSeq Size: 2606 bp

RefSeq ORF: 1875 bp

Locus ID: 9817

UniProt ID: [Q14145](#)

Cytogenetics: 19p13.2

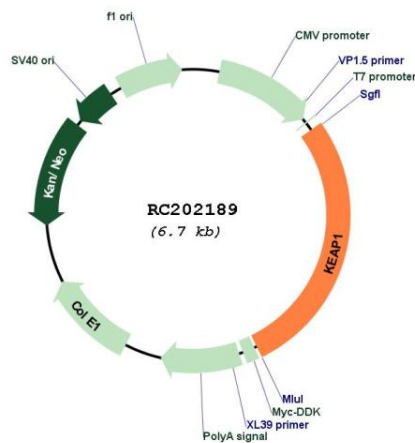
Protein Families: Transcription Factors

Protein Pathways: Ubiquitin mediated proteolysis

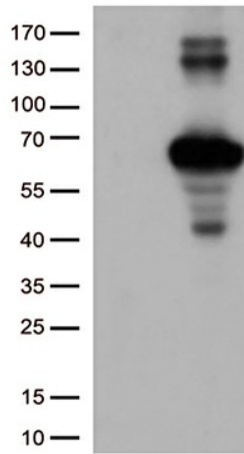
MW: 69.7 kDa

Gene Summary: This gene encodes a protein containing KELCH-1 like domains, as well as a BTB/POZ domain. Kelch-like ECH-associated protein 1 interacts with NF-E2-related factor 2 in a redox-sensitive manner and the dissociation of the proteins in the cytoplasm is followed by transportation of NF-E2-related factor 2 to the nucleus. This interaction results in the expression of the catalytic subunit of gamma-glutamylcysteine synthetase. Two alternatively spliced transcript variants encoding the same isoform have been found for this gene. [provided by RefSeq, Jul 2008]

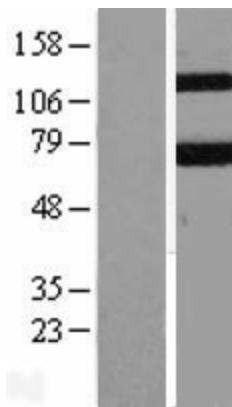
Product images:



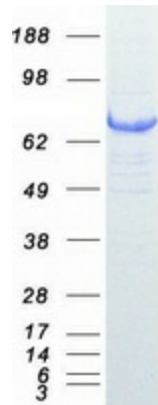
Circular map for RC202189



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY KEAP1 (Cat# RC202189, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-KEAP1 (Cat# [TA502059])(1:1000).



Western blot validation of overexpression lysate (Cat# [LY404250]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202189 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified KEAP1 protein (Cat# [TP302189]). The protein was produced from HEK293T cells transfected with KEAP1 cDNA clone (Cat# RC202189) using MegaTran 2.0 (Cat# [TT210002]).