

Product datasheet for **RC202513**

KEAP1 (NM_012289) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
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:

>RC202513 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCAGCCAGATCCCAGGCCTAGCGGGCTGCGGCTGCTGCCGATTCTGCCCTGCAGTCACAGTGCC
 CTGAGGGGGCAGGGGACGCGGTGATGTACGCCTCCACTGAGTGCAAGGCGGAGGTGACGCCCTCCCAGCA
 TGGCAACCGCACCTTCAGCTACACCCTGGAGGATCATACCAAGCAGGCCTTTGGCATCATGAACGAGCTG
 CGGCTCAGCCAGCAGCTGTGTGACGTCACTGCAGGTCAAGTACCAGGATGCACCGGCCGCCAGTTCA
 TGGCCCAAGGTGGTGTGCTGATCCAGCCCTGTCTTCAAGGCCATGTTACCAACGGGCTGCGGGA
 GCAGGGCATGGAGGTGGTGTCCATTGAGGGTATCCACCCCAAGGTATGGAGCGCCTCATTGAATTCGCC
 TACACGGCCTCCATCTCCATGGGCGAGAAGTGTGTCTCCACGTATGAACGGTGTGTATGTACCAGA
 TCGACAGCGTTGTCGCTGCTGAGTGACTTCTGGTGCAGCAGCTGGACCCAGCAATGCCATCGGCAT
 CGCCAACCTTCGCTGAGCAGATTGGCTGTGTGGAGTTGCACAGCGTGCCCGGGAGTACATCTACATGCAT
 TTTGGGGAGGTGGCCAAGCAAGAGGAGTTCTTCAACCTGTCCACTGCCAAGTGGTACCCCTCATAGCC
 GGGACGACCTGAACGTGCGCTGCGAGTCCGAGGTCTTCCACGCCTGCATCAACTGGGTCAAGTACGACTG
 CGAACAGCGACGGTTCTACGTCCAGGCGCTGTGCGGGCCGTGCGCTGCCACTCGTTGACGCCGAATTC
 CTGCAGATGCAGCTGCAGAGTGCAGATCCTGCAGTCCGACTCCCGCTGCAAGGACTACCTGGTCAAGA
 TCTTCGAGGAGCTCACCTGCACAAGCCACGCAGGTGATGCCCTGCCGGGCGCCCAAGGTGGGCGGCCCT
 GATCTACACCGCGGGCGGCTACTTCCGACAGTCGCTCAGTACCTGGAGGCTTACAACCCAGTGACGGC
 ACCTGGCTCCGGTTGGCGGACCTGCAGGTGCCGCGGAGCGGCTGGCGGCTGCGTGGTGGGCGGGCTGT
 TGTACGCCGTGGGCGGAGGAACAACCTGCCCGACGGCAACACCGACTCCAGCGCCTGGACTGTTACAA
 CCCCATGACCAATCAGTGGTGCCTCGCCCTGCGCCCATGAGCGTGCCCGTAACCGCATCGGGGTGGGGGTC
 ATCGATGGCCACATCTATGCCGTGCGCGGCTCCACGGTGCATCCACCACAACAGTGTGGAGAGGTATG
 AGCCAGAGCGGGATGAGTGGCACTTGGTGGCCCAATGCTGACACGAAGGATCGGGGTGGGCGTGGCTGT
 CCTCAATCGTCTCCTTTATGCCGTGGGGGGCTTTGACGGGACAAACCGCCTTAATTCAGTGAAGTTAC
 TACCCAGAGAGGAACGAGTGGCGAATGATCACAGCAATGAACACCATCCGAAGCGGGGAGGCGTCTGCG
 TCCTGCACAACGTATCTATGCTGCTGGGGCTATGATGGTCAGGACCAGCTGAACAGCTGGAGCGCTA
 CGATGTGGAACAGAGAGCTGGACTTTCGTAGCCCCCATGAAGCACCGGCGAAGTGCCCTGGGGATCACT
 GTCCACCAGGGGAGAATCTACGTCTTGGAGGCTATGATGGTCACACGTTCTGGACAGTGTGGAGTGT
 ACGACCCAGATACAGACCTGGAGCGAGGTGACCCGAATGACATCGGGCGGAGTGGGGTGGGCGTGGC
 TGTCCACATGGAGCCCTGCCGAAGCAGATTGACCAGCAGAATGTACCTGT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC202513 protein sequence
 Red=Cloning site Green=Tags(s)

MQPDRPSGAGACCRFLPLQSQCPEGAGDAVMYASTECKAEVTPSQHGNRTFSYTLIEDHTKQAFGIMNEL
 RLSQQLCDVTLQVKYQDAPAAQFMAHKVVLASSSPVFKAMFTNGLREQGMEVVSIEGIHPKVMERLIEFA
 YTASISMGEKCVLHVMNGAVMYQIDSVVRACSDFLVQQLDPSNAIGIANFAEQIGCVELHQRAREYIMH
 FGEVAKQEEFFNLSHCQLVTLISRDDLNVRCSEVFHACINWVKYDCEQRRFYVQALLRAVRCHSLTPNF
 LQMQLQKCEILQSDSRCKDYLKIFEEELTHKPTQVMPCRAPKVGRLIYTAGGYFRQSLSYLEAYNPDSG
 TWLRLADLQVPRSLAGCVVGGLLYAVGGRNNSPDGNTDSSALDCYNPMTNQWSPCAPMSVPRNRIGVGV
 IDGHIYAVGGSHGCIHNSVERYEPERDEWHLVAPMLTRRIGVGVAVLNRLLYAVGGFDGTLNSAECY
 YPERNEWRMITAMNTIRSGAGVCVLHNCIYAAGGYDQDQLNSVERYDVETETWTFVAPMKHRRSALGIT
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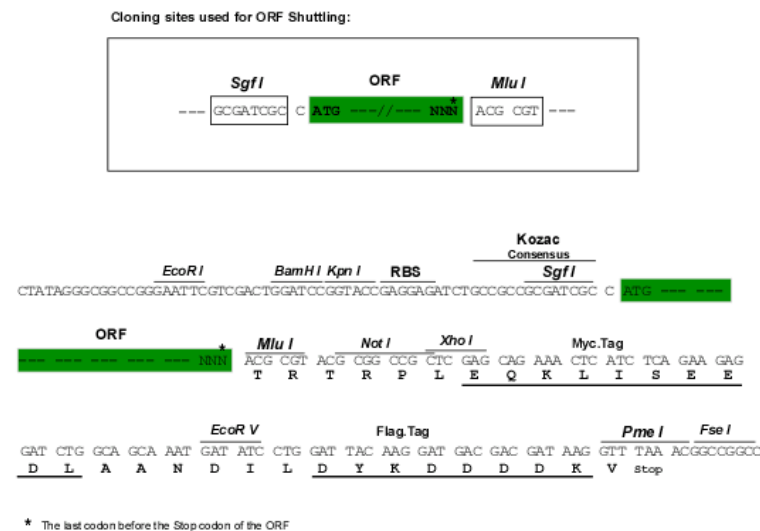
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6150_h07.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM 012289

ORF Size: 1872 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: NM 012289.4

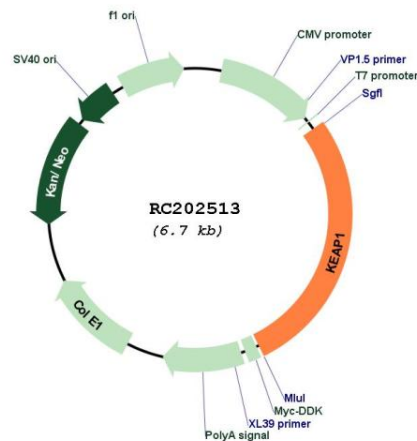
RefSeq Size: 2577 bp

RefSeq ORF: 1875 bp

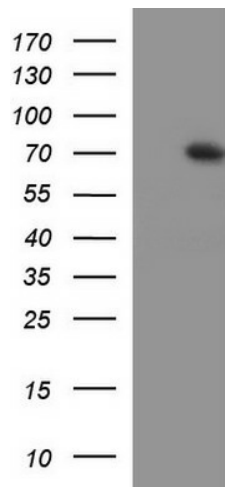
Locus ID: 9817
UniProt ID: [Q14145](#)
Cytogenetics: 19p13.2
Domains: BTB, Kelch
Protein Families: Transcription Factors
Protein Pathways: Ubiquitin mediated proteolysis
MW: 69.7 kDa

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]

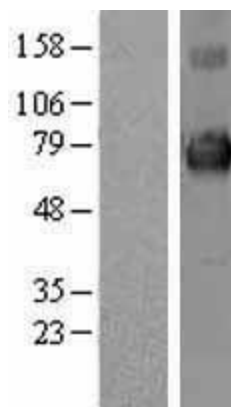
Product images:



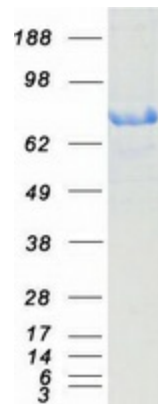
Circular map for RC202513



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY KEAP1 (Cat# RC202513, 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# [TA590238]). Positive lysates [LY402183] (100ug) and [LC402183] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY402183]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202513 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified KEAP1 protein (Cat# [TP302513]). The protein was produced from HEK293T cells transfected with KEAP1 cDNA clone (Cat# RC202513) using MegaTran 2.0 (Cat# [TT210002]).