

Product datasheet for **RC223935**

Kallikrein 2 (KLK2) (NM_001002231) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kallikrein 2 (KLK2) (NM_001002231) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Kallikrein 2
Synonyms:	hGK-1; hK2; KLK2A2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC223935 representing NM_001002231 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTGGGACCTGGTTCTCTCCATCGCCTTGCTGTGGGGTGCCTGGTGGCGTGGCCCTCATCCAGTCTC
GGATTGTGGGAGGCTGGGAGTGTGAGAAGCATTCCCAACCCTGGCAGGTGGCTGTGTACAGTCATGGATG
GGCACACTGTGGGGTGTCTGGTGCACCCCAAGTGGTGTCTCACAGCTGCCATTGCCTAAAGAAGAAT
AGCCAGGTCTGGCTGGTGGTGGCACAACCTGTTGAGCCTGAAGACACAGGCCAGAGGGTCCCTGTCAGCC
ACAGCTTCCCACACCCGCTCTACAATATGAGCCTTCTGAAGCATCAAAGCCTTAGACCAGATGAAGACTC
CAGCCATGACCTCATGCTGCTCCGCCTGTGAGAGCCTGCCAAGATCACAGATGTTGTGAAGTCCCTGGGC
CTGCCACCCAGGAGCCAGCACTGGGGACCACTGCTACGCCTCAGGCTGGGGCAGCATCGAACCAGAGG
AGTTCTTGCGCCCCAGGAGTCTTCAGTGTGTGAGCCTCCATCTCCTGTCCAATGACATGTGTGCTAGAGC
TACTCTGAGAAGGTGACAGAGTTCATGTTGTGTGCTGGGCTCTGGACAGGTGGTAAAGACACTTGTGGG
GTGAGTCATCCCTACTCCAACATCTGGAGGGGAAAGGG

ACGCGTACGCGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC223935 representing NM_001002231
 Red=Cloning site Green=Tags(s)

MWDLVLSIALSVGCTGAVPLIQSRIVGGWECEKHSQPWQVAVYSHGWAHCGGVLVHPQWVLTAAHCLKKN
 SQVWLGGRHNLFEPEDTGQRVPVSHSFPHPLYNMSLLKHQSLRPDEDSSHDLMLLRLSEPAKITDVVKVLG
 LPTQEPALGTTTCYASGWSIEPEEFLRPRSLQCVSLHLLSNDMCARAYSEKVTDFMLCAGLWTGGKDTCC
 VSHPYSQLHEGKG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001002231

ORF Size: 669 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_001002231.3](#)

RefSeq Size: 2892 bp

RefSeq ORF: 672 bp

Locus ID: 3817

UniProt ID: [P20151](#)

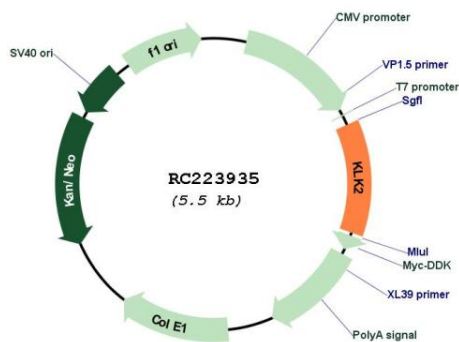
Cytogenetics: 19q13.33

Protein Families: Druggable Genome, Protease

MW: 24.5 kDa

Gene Summary: This gene encodes a member of the grandular kallikrein protein family. Kallikreins are a subgroup of serine proteases that are clustered on chromosome 19. Members of this family are involved in a diverse array of biological functions. The protein encoded by this gene is a highly active trypsin-like serine protease that selectively cleaves at arginine residues. This protein is primarily expressed in prostatic tissue and is responsible for cleaving pro-prostate-specific antigen into its enzymatically active form. This gene is highly expressed in prostate tumor cells and may be a prognostic maker for prostate cancer risk. Alternate splicing results in both coding and non-coding transcript variants. [provided by RefSeq, Jan 2012]

Product images:



Circular map for RC223935