

Product datasheet for RC202744

Kallikrein 1 (KLK1) (NM_002257) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kallikrein 1 (KLK1) (NM_002257) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Kallikrein 1
Synonyms:	hK1; Klk6; KLKR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC202744 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTGGTTCCTGGTCTGTGCCTCGCCCTGTCCCTGGGGGGACTGGTGTGCGCCCCGATTCAGTCCC
GGATTGTGGGAGGCTGGGAGTGTGAGCAGCATTCCAGCCCTGGCAGGCGGCTCTGTACCATTTAGCAC
TTTCCAGTGTGGGGCATCCTGGTGCACCGCCAGTGGGTGCTCACAGCTGCTCATTGCATCAGCGACAAT
TACCAGCTCTGGCTGGTGCACCAACTGTTTGACGACGAAAACACAGCCAGTTTGTTCATGTCAGTG
AGAGCTTCCCACACCCTGGCTTCAACATGAGCCTCCTGGAGAACCACCCGCCAAGCAGACGAGGACTA
CAGCCACGACCTCATGCTGCTCCGCTGACAGAGCCTGCTGATACCATCACAGACGCTGTGAAGGTCGTG
GAGTTGCCACCCAGGAACCCGAAGTGGGAGCACCTGTTTGGCTTCCGGCTGGGCAGCATCGAACCCAG
AGAATTTCTCATTTCAGATGATCTCCAGTGTGTGGACCTCAAAATCCTGCCTAATGATGAGTGCAAAA
AGTCCACGTCCAGAAGGTGACAGACTTCATGCTGTGTGTCGGACACCTGGAAGGTGGCAAAGACACCTGT
GTGGGTGATTCAGGGGGCCCGTGTGTGTGATGGTGTGCTCCAAGGTGTACATCATGGGGCTACGTCC
CTTGTGGCACCCCAATAAGCCTTCTGTCGCCGTGAGTGTGCTTATGTGAAGTGGATCGAGGACAC
CATAGCGGAGAACTCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC202744 protein sequence
Red=Cloning site Green=Tags(s)

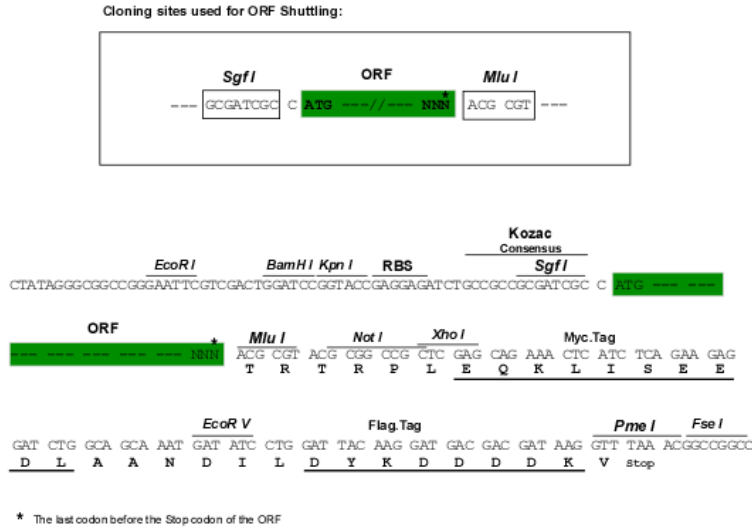
MWFLVLCALSLGGTGAAPPIQSRIVGGWECEQHSQPWQAALYHFSTFQCGGILVHRQWVLTAAHCISDN
 YQLWLRHNLFFDENTAQFVHVSESFPHPGFNMSLLENHTRQADEDYSHDLMLRLTEPADTITDAVKV
 ELPTQEPEVGSTCLASGWSIEPENFSFPDDLQCVDLKILPNDECKKVHVQKVTDFMLCVGHLEGGKDT
 VGDSGGPLMCDGVLQGVTSWGYVPCGTPNKPSSAVRVLVYVKWIEDTIAENS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6050_d03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002257

ORF Size: 786 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_002257.4](#)

RefSeq Size: 886 bp

RefSeq ORF: 789 bp

Locus ID: 3816

UniProt ID: [P06870](#)

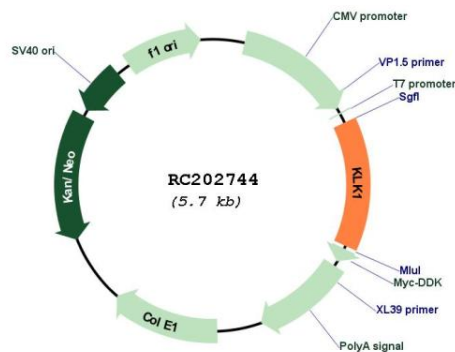
Cytogenetics: 19q13.33

Protein Families: Druggable Genome, Protease

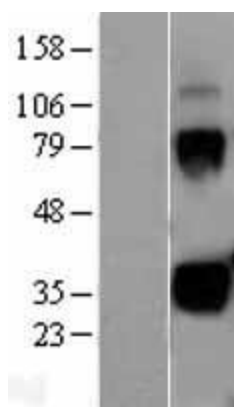
MW: 28.9 kDa

Gene Summary: Kallikreins are a subgroup of serine proteases having diverse physiological functions. Growing evidence suggests that many kallikreins are implicated in carcinogenesis and some have potential as novel cancer and other disease biomarkers. This gene is one of the fifteen kallikrein subfamily members located in a cluster on chromosome 19. This protein is functionally conserved in its capacity to release the vasoactive peptide, Lys-bradykinin, from low molecular weight kininogen. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC202744



Western blot validation of overexpression lysate (Cat# [LY400820]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202744 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).