

Product datasheet for **RC218647**

Kallikrein 6 (KLK6) (NM_002774) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kallikrein 6 (KLK6) (NM_002774) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Kallikrein 6
Synonyms:	Bssp; hK6; Klk7; PRSS9; PRSS18; SP59
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC218647 representing NM_002774 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGAAGCTGATGGTGGTGCTGAGTCTGATTGCTGCAGCCTGGGCAGAGGAGCAGAATAAGTTGGTGC
ATGGCGGACCCTGCGACAAGACATCTCACCCCTACCAAGCTGCCCTCTACACCTCGGGCCACTTGCTCTG
TGGTGGGGTCTTATCCATCCACTGTGGGTCTCACAGCTGCCACTGCAAAAAACCGAATCTTCAGGTC
TTCCTGGGAAGCATAACCTTCGGCAAAGGAGAGTTCAGGAGCAGAGTCTGTGTCCGGGCTGTGA
TCCACCCTGACTATGATGCCGCCAGCCATGACCAGGACATCATGCTGTTGCGCCTGGCAGCCCAGCCAA
ACTCTCTGAACCTATCCAGCCCTTCCCTGGAGAGGGACTGCTCAGCCAACACCACCAGCTGCCACATC
CTGGGCTGGGGCAAGACAGCAGATGGTGATTTCCCTGACACCATCCAGTGTGCATACATCCACCTGGTGT
CCCGTGAGGAGTGTGAGCATGCCTACCCTGGCCAGATCACCCAGAACATGTTGTGTGCTGGGGATGAGAA
GTACGGGAAGGATTCTGCCAGGGTATTCTGGGGTCCGCTGGTATGTGGAGACCACCTCCGAGGCCTT
GTGTATGGGGTAACATCCCCTGTGGATCAAAGGAGAAGCCAGGAGTCTACACCAACGTCTGCAGATACA
CGAACTGGATCCAAAAACCATTCAGGCCAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC218647 representing NM_002774
Red=Cloning site Green=Tags(s)

MKKLMVVL SLIAAAWAE EQNKL VHGGPCDKT SHPYQAAL YTSGLL CGGVLI HPLWVLTAAHCKKPNLQV
 FLGKHNLRQRESSQE QSSVVRV IHPDYDAASHDQDIMLLRLARPAKLS ELIQPLPLERDCSANTTSCHI
 LGWGKTADGDFPDTIQ CAYIHLVSREECHAYPGQITQ NMLCAGDEKYGK DSCQGDSSGGLVCGDHLRGL
 VSWGNI PCGSK EKP G VYTNVCRYTNW IQKTIQAK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6036_e03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_002774

ORF Size: 732 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_002774.4](#)

RefSeq Size: 1527 bp

RefSeq ORF: 735 bp

Locus ID: 5653

UniProt ID: [Q92876](#)

Cytogenetics: 19q13.41

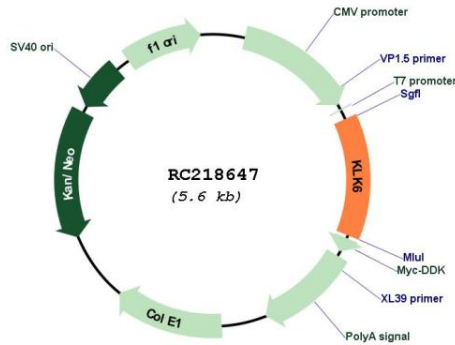
Domains: Tryp_SPc

Protein Families: Druggable Genome, Protease, Secreted Protein

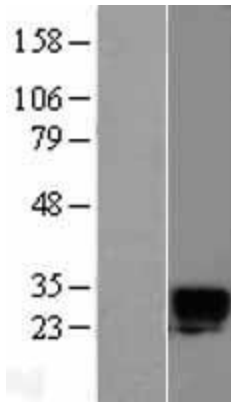
MW: 26.86 kDa

Gene Summary: This gene encodes a member of the kallikrein subfamily of the peptidase S1 family of serine proteases. Growing evidence suggests that many kallikreins are implicated in carcinogenesis and some have potential as novel cancer and other disease biomarkers. The encoded preproprotein is proteolytically processed to generate the mature protease. Expression of this protease is regulated by steroid hormones and may be elevated in multiple human cancers and in serum from psoriasis patients. The encoded protease may participate in the cleavage of amyloid precursor protein and alpha-synuclein, thus implicating this protease in Alzheimer's and Parkinson's disease, respectively. This gene is located in a gene cluster on chromosome 19. Alternative splicing results in multiple transcript variants, at least one of which encodes an isoform that is proteolytically processed. [provided by RefSeq, Feb 2016]

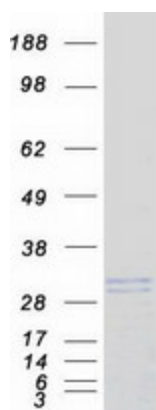
Product images:



Circular map for RC218647



Western blot validation of overexpression lysate (Cat# [LY400982]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218647 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified KLK6 protein (Cat# [TP318647]). The protein was produced from HEK293T cells transfected with KLK6 cDNA clone (Cat# RC218647) using MegaTran 2.0 (Cat# [TT210002]).