

Product datasheet for RC211624

Prostate Specific Antigen (KLK3) (NM_001030048) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Prostate Specific Antigen (KLK3) (NM_001030048) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KLK3
Synonyms:	APS; hK3; KLK2A1; PSA
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC211624 representing NM_001030048 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTGGGTCCCGTTGTCTTCCTCACCCGTCCGTGACGTGGATTGGTGTGCACCCCTCATCTGTCTC
GGATTGTGGGAGGCTGGGAGTGCAGAGAAGCATTCCCAACCCTGGCAGGTGCTTGTGGCCTCTCGTGGCAG
GGCAGTCTGCGGGGTGTCTGGTGCACCCCACTGGGTCTCACAGCTGCCACTGCATCAGGAAGCCA
GGTGTACTCCAGCCACGACCTCATGTGCTCCGCTGTGAGAGCTGCCGAGCTCACGGATGCTGTGA
AGGTCATGGACCTGCCACCCAGGAGCCAGCACTGGGGACCACCTGCTACGCCTCAGGCTGGGGCAGCAT
TGAACCAGAGGAGTTCTTGACCCCAAAGAACTTCAGTGTGTGGACCTCCATGTTATTTCCAATGACGTG
TGTGCGCAAGTTCACCCTCAGAAGGTGACCAAGTTCATGCTGTGTGCTGGACGCTGGACAGGGGGCAAAA
GCACCTGCTCGGGTATTCTGGGGGCCACTTGTCTGTAATGGTGTGCTTCAAGGTATCACGTATGGGG
CAGTGAACCATGTGCCCTGCCGAAAGGCCTTCCCTGTACACCAAGGTGGTGCATTACCGGAAGTGGATC
AAGGACACCATCGTGGCCAACCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC211624 representing NM_001030048
 Red=Cloning site Green=Tags(s)

MWVPVFLTLSVTWIGAAPLILSRIVGGWECEKHSQPWQVLVASRGRAVCGGVLVHPQWVLTAAHCIRKP
 GDDSSHDMLLRLLSEPAELTDAVKVMDLPTQEPALGTTTCYASGWSIEPEEFLTPKKLQCVDLHVISNDV
 CAQVHPQKVTKFMLCAGRWTGGKSTCSGDSGGPLVCNGVLQGITSWGSEPCALPERPSLYTKVVHYRKWI
 KDTIVANP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

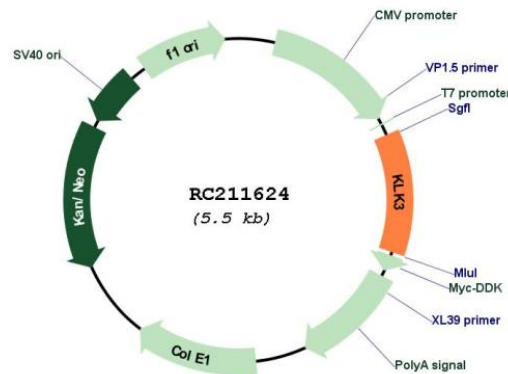
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001030048

ORF Size: 654 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:	<ol style="list-style-type: none">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_001030048.1 , NP_001025219.1
RefSeq Size:	1335 bp
RefSeq ORF:	657 bp
Locus ID:	354
UniProt ID:	P07288
Cytogenetics:	19q13.33
Protein Families:	Druggable Genome, Protease, Secreted Protein
Protein Pathways:	Pathways in cancer, Prostate cancer
MW:	23.72 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. The gene is one of the fifteen kallikrein subfamily members located in a cluster on chromosome 19. It encodes a single-chain glycoprotein, a protease which is synthesized in the epithelial cells of the prostate gland, and is present in seminal plasma. It is thought to function normally in the liquefaction of seminal coagulum, presumably by hydrolysis of the high molecular mass seminal vesicle protein. The serum level of this protein, called PSA in the clinical setting, is useful in the diagnosis and monitoring of prostatic carcinoma. Alternate splicing of this gene generates several transcript variants encoding different isoforms. [provided by RefSeq, Dec 2019]