

## Product datasheet for **RC236159**

### Kallikrein 4 (KLK4) (NM\_001302961) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Kallikrein 4 (KLK4) (NM_001302961) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Kallikrein 4
Synonyms:	A12A1; ARM1; EMSP; EMSP1; kallikrein; KLK-L1; PRSS17; PSTS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC236159 representing NM_001302961 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGTGGAGGCCAGCCTCTCCGTACGGCACCCAGAGTACAACAGACCCTTGCTCGCTAACGACCTCATGC  
TCATCAAGTTGGACGAATCCGTGTCCGAGTCTGACACCATCCGGAGCATCAGCATTGCTTCGAGTGCCC  
TACCGCGGGAACCTTTGCCTCGTTTCTGGCTGGGTCTGCTGGCGAACGGCAGAATGCCTACCGTGCTG  
CAGTGCCTGAACGTGTCGGTGGTGTCTGAGGAGGTCTGCAGTAAGCTCTATGACCCGCTGTACACCCCA  
GCATGTTCTGCGCCGGCGGAGGCAAGACCAGAAGGACTCCTGCAACGGTGACTCTGGGGGGCCCTGAT  
CTGCAACGGGTACTTGCAGGGCCTTGTGTCTTTGCGAAAAGCCCCGTGTGGCCAAGTTGGCGTGCCAGGT  
GTCTACACCAACCTCTGCAAATCACTGAGTGGATAGAGAAAACCGTCCAGGCCAGT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC236159 representing NM_001302961 Red=Cloning site Green=Tags(s)
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MVEASLSVRHPEYNRPLLANDLMLIKLDESVSSEDTIRISISIASQCPTAGNSCLVSGWLLANGRMPTVL  
QCYNVSVVSEEVCSKLYDPLYHPSMFCAGGGQDQKDCNGDSGGPLICNGYLQGLVSFGKAPCGQVGVPG  
VYTNLCKFTEWIEKTVQAS

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:	SgfI-MluI
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## Cloning Scheme:



ACCN: NM\_001302961

ORF Size: 477 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\\_001302961.1](#), [NP\\_001289890.1](#)

RefSeq Size: 1359 bp

RefSeq ORF: 480 bp

Locus ID: 9622

UniProt ID: [Q9Y5K2](#)

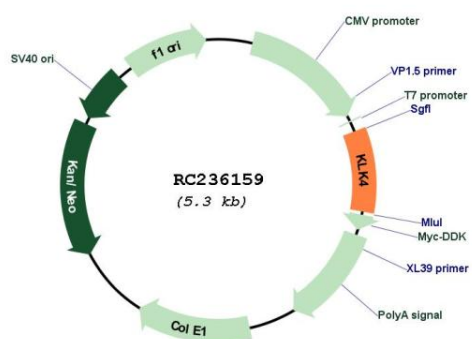
Cytogenetics: 19q13.41

Protein Families: Druggable Genome, Secreted Protein, Transmembrane

MW: 17.4 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. In some tissues its expression is hormonally regulated. The expression pattern of a similar mouse protein in murine developing teeth supports a role for the protein in the degradation of enamel proteins. Several transcript variants encoding different proteins have been found for this gene. [provided by RefSeq, Dec 2014]

## Product images:



Circular map for RC236159