

## Product datasheet for **RC221010**

### Kallikrein 8 (KLK8) (NM\_144505) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Kallikrein 8 (KLK8) (NM\_144505) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Kallikrein 8  
**Synonyms:** HNP; NP; NRPN; PRSS19; TADG14  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC221010 representing NM\_144505  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGGGACGCCCCGACCTCGTGC GGCCAAGACGTGGATGTTCTGCTCTTGCTGGGGGAGCCTGGGCAG  
CGTGTGGAAGCCTGGACCTCCTCACTAAGTTGTATGCGGAGAACTTGCCGTGTGCCATTTGAACCCACA  
GTGGCCTTCCCAGCCCTCGCACTGCCCCAGAGGGTGGCGATCCAACCCTCCTCCTGCTGCAGGACAC  
TCCAGGGCACAGGAGGACAAGGTGCTGGGGGTCATGAGTGCCAACCCCATTCGCAGCCTTGGCAGGCGG  
CCTTGTTCCAGGGCCAGCAACTACTCTGTGGCGGTGCCTTGTAGGTGGCAACTGGTCCCTACAGCTGC  
CCACTGTAAAAAACCGAAATACACAGTACGCCTGGGAGACCACAGCCTACAGAATAAAGATGGCCCCAGAG  
CAAGAAATACCTGTGGTTCACTGCTGACCCAGGCATCCCTGGGGTCCAAAGTGAAGCCCATCAGCCTGGC  
AGATCATTGCACCCAGCCTGGCCAGAAGTGACCGTCTCAGGCTGGGGCACTGTCACCCAGTCCCCGAGAG  
AATTTTCTGACACTCTCAACTGTGCAGAAGTAAAAATCTTTCCCAGAAGAAGTGTGAGGATGCTTACC  
CGGGGCAGATCACAGATGGCATGGTCTGTGCAGGCAGCAGCAAAGGGGCTGACACGTGCCAGGGCGATT  
TGGAGGCCCTGGTGTGTGATGGTGCCTCCAGGGCATCACATCTGGGGCTCAGACCCCTGTGGGAGG  
TCCGACAAACCTGGCGTCTATACCAACATCTGCCGCTACCTGGACTGGATCAAGAAGATCATAGGCAGCA  
AGGGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC221010 representing NM\_144505  
 Red=Cloning site Green=Tags(s)

MGRPRPRAAKTWMFLLLLGGAWAACGSLDLLTKLYAENLPCVHLNPQWPSQPSHCPRGWRSNPLPPAAGH  
 SRAQEDKVLGGHECQPHSQPWQAALFQGGQLCCGVLVGGNWVLTAAHCKKPKYTVRLGDHSLQNKDGPE  
 QEIPVVQSIHPHCYNSSDVEDHNHDLMLLQLRDQASLGSKVKPI SLADHCTQPGQKCTVSWGVTVTSPRE  
 NFPDTLNCAEVKIFPQKKCEDAYPGQITDGMVACAGSSKGADTCQGDSSGGLVCDGALQGITSWGSDPCGR  
 SDKPGVYTNICRYLDWIKKIIGSKG

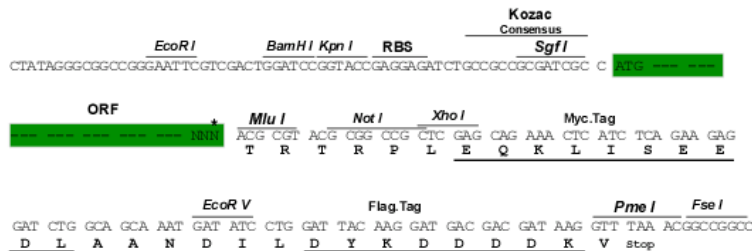
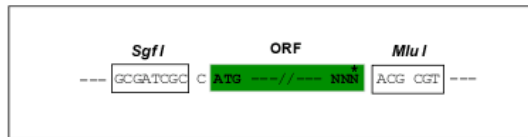
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8050\\_h10.zip](https://cdn.origene.com/chromatograms/mk8050_h10.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\_144505

**ORF Size:** 915 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\\_144505.3](#)

**RefSeq Size:** 1148 bp

**RefSeq ORF:** 918 bp

**Locus ID:** 11202

**UniProt ID:** [O60259](#)

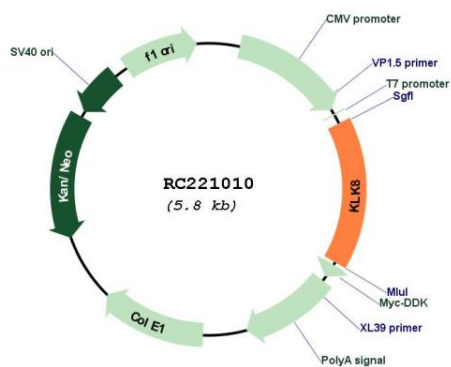
**Cytogenetics:** 19q13.41

**Protein Families:** Druggable Genome, Secreted Protein, Transmembrane

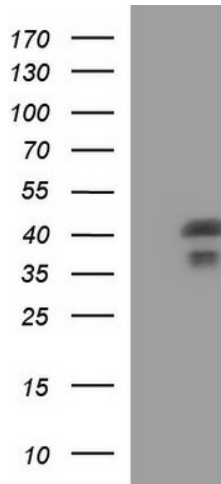
**MW:** 32.8 kDa

**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 tandem in a gene cluster on chromosome 19. The encoded protein may be involved in proteolytic cascade in the skin and may serve as a biomarker for ovarian cancer. Alternate splicing of this gene results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2013]

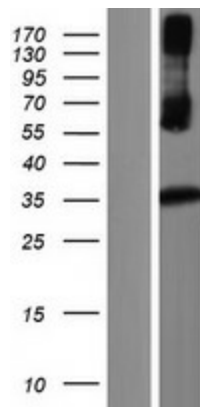
Product images:



Circular map for RC221010



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY KLK8 (Cat# RC221010, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-KLK8 (Cat# [TA590404]). Positive lysates [LY430111] (100ug) and [LC430111] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY408269]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221010 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).