

Product datasheet for **RC208152**

Kallikrein 8 (KLK8) (NM_007196) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kallikrein 8 (KLK8) (NM_007196) 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:	>RC208152 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGACGCCCCGACCTCGTGC GGCCAAGACGTGGATGTTCTGCTCTTGCTGGGGGAGCCTGGGCAG
GACTCCAGGGCACAGGAGGACAAGGTGCTGGGGGTCATGAGTGCCAACCCATTTCGAGCCTTGGA
GGCGCCTTGTCCAGGGCCAGCAACTACTCTGTGGCGGTCTTGTAGGTGGCAACTGGTCTTACA
GCTGCCACTGTAAAAACCGAAATACACAGTACGCTGGGAGACCACAGCCTACAGAATAAAGATGGCC
CAGAGCAAGAAATACCTGTGGTTCAGTCCATCCCACCCCTGCTACAACAGCAGCGATGTGGAGGACCA
CAACCATGATCTGATGCTTCTCAACTGCGTGACCAGGCATCCCTGGGGTCCAAAGTGAAGCCCATCAGC
CTGGCAGATCATTGCACCCAGCCTGGCCAGAAGTGCACCGTCTCAGGCTGGGGCACTGTACCAGTCCCC
GAGAGAATTTTCTGACTCTCAACTGTGCAGAAGTAAAAATCTTTCCCAGAAGAAGTGTGAGGATGC
TTACCCGGGGCAGATCACAGATGTATGGTCTGTGCAGGCAGCAGCAAAGGGGCTGACACGTGCCAGGGC
GATTCTGGAGGCCCTGGTGTGTGATGGTGCCTCCAGGGCATCACATCCTGGGGCTCAGACCCCTGTG
GGAGGTCGCAAACTGGCGTCTATACCAACATCTGCCGCTACCTGGACTGGATCAAGAAGATCATAGG
CAGCAAGGGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC208152 protein sequence
 Red=Cloning site Green=Tags(s)

MGRPRPRAAKTWMFLLLLGGAWAGHSRAQEDKVLGGHECQPHSQPWQAALFQGQQLLCGGVLVGGNWLTA
 AAHCKKPKYTVRLGDHSLQNKDGPEQEIPVVQSIHPHCYNSSDVEDHNHDLMLLQLRDQASLGSKVKPIS
 LADHCTQPGQKCTVSGWGTVTSPRENFDTLNCAEVKIFPQKKCEDAYPGQITDVMVCAGSSKGADTCQG
 DSGGPLVCDGALQGITSWGSDDPCGRSDKPGVYTNICRYLDWIKKIIGSKG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6348_h03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_007196

ORF Size: 780 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_007196.4](#)

RefSeq Size: 1023 bp

RefSeq ORF: 783 bp

Locus ID: 11202

UniProt ID: [O60259](#)

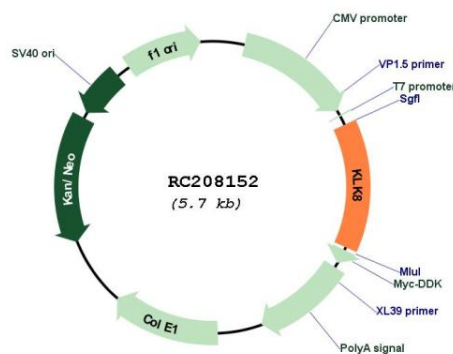
Cytogenetics: 19q13.41

Protein Families: Druggable Genome, Secreted Protein, Transmembrane

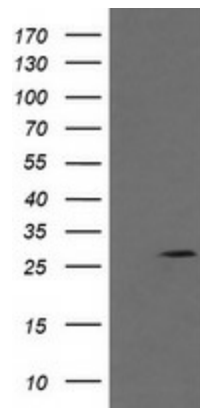
MW: 28.1 kDa

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]

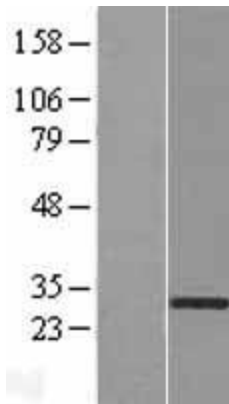
Product images:



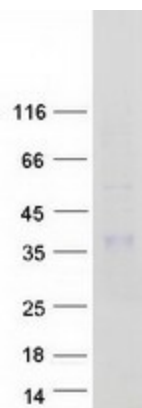
Circular map for RC208152



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY KLK8 (Cat# RC208152, 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# [TA506135]). Positive lysates [LY416130] (100ug) and [LC416130] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY416130]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208152 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified KLK8 protein (Cat# [TP308152]). The protein was produced from HEK293T cells transfected with KLK8 cDNA clone (Cat# RC208152) using MegaTran 2.0 (Cat# [TT210002]).