

## Product datasheet for RC209707

### Cytokeratin 19 (KRT19) (NM\_002276) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cytokeratin 19 (KRT19) (NM_002276) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cytokeratin 19
Synonyms:	CK19; K1CS; K19
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC209707 representing NM_002276 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGACTTCCTACAGCTATCGCCAGTCGTCGGCCACGTCGTCCTTCGGAGGCCTGGGCGCGGCTCCGTGC  
GTTTTGGGCCGGGGTCGCTTTTCGCGCGCCAGCATTACGGGGGCTCCGGCGCGCGGCGTATCCGT  
GTCCTCCGCCGCTTTGTGTCCTCGTCTCCTCGGGGGCTACGGCGCGGCTACGGCGGCTCCTGACC  
GCGTCCGACGGGCTGCTGGCGGCAACGAGAAGCTAACCATGCAGAACCTCAACGACCGCTGCCCTCT  
ACCTGGACAAGGTGCGCGCCCTGGAGGCGCCAACGGCGAGCTAGAGGTGAAGATCCGCGACTGGTACCA  
GAAGCAGGGGCTGGGCCCTCCCGGACTACAGCCACTACTACAGACCATCCAGGACCTGCGGGACAAG  
ATTCTTGGTGCCACCATTGAGAACTCCAGGATTGTCTGCAGATCGACAACGCCCGTCTGGCTGCAGATG  
ACTTCCGAACCAAGTTTGGAGCGAACAGGCTCTGCGCATGAGCGTGGAGGCCGACATCAACGGCCTGCG  
CAGGGTGTGGATGAGCTGACCTGGCCAGGACCGACCTGGAGATGCAGATCGAAGGCCTGAAGGAAGAG  
CTGGCCTACCTGAAGAAGAACCATGAGGAGGAAATCAGTACGCTGAGGGGCAAGTGGGAGGCCAGGTCA  
GTGTGGAGGTGGATCCGCTCCGGGCACCGATCTCGCCAAGATCCTGAGTGACATGCGAAGCCAATGA  
GGTCATGGCCGAGCAGAACCAGGATGCTGAAGCCTGGTTCACCAGCCGGACTGAAGAATTGAACCGG  
GAGGTCGCTGGCCACCGGAGCAGTCCAGATGAGCAGGTCGAGGTTACTGACCTGCGGCGCACCTTC  
AGGGTCTTGAGATTGAGCTGCAGTCACAGCTGAGCATGAAAGCTGCCTTGGAAAGACACTGGCAGAAAC  
GGAGGCGCGCTTTGGAGCCAGCTGGCGCATATCCAGGCGCTGATCAGCGGTATTGAAGCCAGCTGGGC  
GATGTGCGAGCTGATAGTGAGCGGCAGAAATCAGGAGTACCAGCGGCTCATGGACATCAAGTCGCGGCTGG  
AGCAGGAGATTGCCACCTACCGCAGCCTGCTCGAGGGACAGGAAGATCACTACAACAATTTGTCTGCCTC  
CAAGGTCCTC

**ACGCGT**ACGCGGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



**Protein Sequence:** >RC209707 representing NM\_002276  
Red=Cloning site Green=Tags(s)

MTSYSYRQSSATSSFGLGGGSVRFPGVAFRAPSIHGGSGRGVSVSSARFVSSSSSGGYGGGYGGVLT  
 ASDGLLAGNEKLTMQNLNDRLASYLDKVRALAAANGELEVKIRDWYQKQPGPSRDYSHYTTIQDLRDK  
 ILGATIENSRIVLQIDNARLAADDFRTKFETEQLRMSVEADINGLRRVLDLDELTLARTDLEMQIEGLKEE  
 LAYLKKNHHEEISTLRGQVGGQVSEVDSAPGTDLAKILSDMRSQYEVMAEQNRKDAEAWFTSRTEELNR  
 EVAGHTEQLQMSRSEVTLRRTLQGLEIELQSQLSMKAALEDTLAETEARFQAQLAHIQALISGIEAQLG  
 DVRADSERQNEYQRLMDIKSRLEQEIATYRSLLLEGQEDHYNNLSASKVL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6269\\_a09.zip](https://cdn.origene.com/chromatograms/mk6269_a09.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_002276

**ORF Size:** 1200 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\\_002276.5](#)

**RefSeq Size:** 1490 bp

**RefSeq ORF:** 1203 bp

**Locus ID:** 3880

**UniProt ID:** [P08727](#)

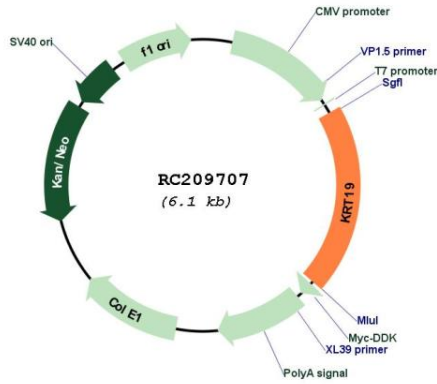
**Cytogenetics:** 17q21.2

**Domains:** filament

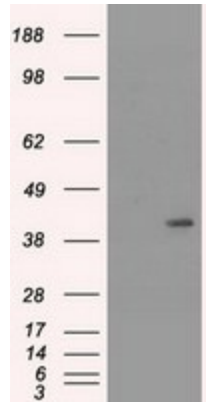
**MW:** 43.9 kDa

**Gene Summary:** The protein encoded by this gene is a member of the keratin family. The keratins are intermediate filament proteins responsible for the structural integrity of epithelial cells and are subdivided into cytokeratins and hair keratins. The type I cytokeratins consist of acidic proteins which are arranged in pairs of heterotypic keratin chains. Unlike its related family members, this smallest known acidic cytokeratin is not paired with a basic cytokeratin in epithelial cells. It is specifically expressed in the periderm, the transiently superficial layer that envelopes the developing epidermis. The type I cytokeratins are clustered in a region of chromosome 17q12-q21. [provided by RefSeq, Jul 2008]

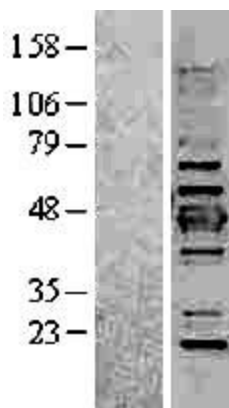
Product images:



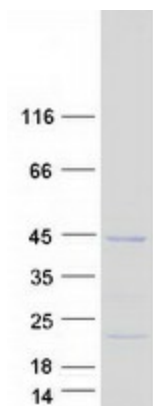
Circular map for RC209707



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY KRT19 (Cat# RC209707, 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-KRT19 (Cat# [TA500212]). Positive lysates [LY419428] (100ug) and [LC419428] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY419428]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209707 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified KRT19 protein (Cat# [TP309707]). The protein was produced from HEK293T cells transfected with KRT19 cDNA clone (Cat# RC209707) using MegaTran 2.0 (Cat# [TT210002]).