

Product datasheet for **RC204470**

Cytokeratin 16 (KRT16) (NM_005557) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cytokeratin 16 (KRT16) (NM_005557) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cytokeratin 16
Synonyms:	CK16; FNEPPK; K1CP; K16; KRT16A; NEPPK; PC1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC204470 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGACCACCTGCAGCCGCCAGTTCACCTCCTCCAGCTCCATGAAGGGCTCCTGCGGCATCGGAGGCGGCA
 TCGGGGGCGGCTCCAGCCGCATCTCCTCCGTCTGGCCGAGGGTCTGCCGTGCCCCAGCACCTACGG
 GGGCGCCTGTCTGTCTCCTCTCGCTTCTCCTCTGGGGGAGCCTGCGGGCTGGGGGGCGGTATGGCGGT
 GGCTTCAGCAGCAGCAGCAGCTTTGGTAGTGGCTTCGGGGGAGGATATGGTGGTGGCCTTGGTGCTGGCT
 TCGGTGGTGGCTTGGGTGCTGGCTTTGGTGGTGGTTTTGCTGGTGGTGGTGGCTTCTGGTGGGAGTGA
 GAAGGTGACCATGCAGAACCTCAATGACCGCTGGCTCCTACCTGGACAAGGTGCGTGTCTGGAGGAG
 GCCAACCGCCGACCTGGAAGTGAAGATCCGTGACTGGTACCAGAGGCAGCGGCCAGTGAGATCAAAGACT
 ACAGTCCCTACTCAAGACCATCGAGGACCTGAGGAACAAGATCATTGCGGCCACCATTGAGAATGCGCA
 GCCATTTTGCAGATTGACAATGCCAGGCTGGCAGCCGATGACTTCAGGACCAAGTATGAGCATGAACTG
 GCCTGCGGCAGACTGTGGAGGCGGACGTCATGGCCTGCGCCGGGTGTTGGATGAGCTGACCTGGCCA
 GGACTGACCTGGAGATGCAGATCGAAGGCTGAAGGAGGAGCTGGCTACCTGAGGAAGAACCACGAGGA
 GGAGATGCTTGCTCTGAGAGGTGAGACCGCGGAGATGTGAACGTGGAGATGGATGCTGCACCTGGCGTG
 GACCTGAGCCGCATCCTGAATGAGATGCGTGACCAAGTACGAGCAGATGGCAGAGAAAAACCGCAGAGACG
 CTGAGACCTGGTTCCTGAGCAAGACCGAGGAGCTGAACAAAGAAGTGGCTCCAACAGCGAACTGGTACA
 GAGCAGCCGACGTGAGGTGACGGAGCTCCGAGGGTGTCCAGGGCTGGAGATTGAGCTGCAGTCCCAG
 CTCAGCATGAAAGCATCCCTGGAGAACAGCCTGGAGGAGACCAAGGCCGCTACTGCATGCAGCTGTCCC
 AGATCCAGGGACTGATTGGCAGTGTGGAGGAGCAGCTGGCCAGCTACGCTGTGAGATGGAGCAGAGAG
 CCAGGAGTACCAGATCTTGTGGATGTGAAGACGCGGCTGGAGCAGGAGATTGCCACCTACCGCCGCTG
 CTGGAGGGCGAGGATGCCACCTTCTCCAGCAAGCATCTGGCCAATCCTATTCTTCCCGGAGGTCT
 TCACCTCCTCCTCGTCTCTTCGAGCCGTGAGCCCGGCCATCCTCAAGGAGCAGAGCTCATCCAGCTT
 CAGCCAGGGCCAGAGCTCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC204470 protein sequence
 Red=Cloning site Green=Tags(s)

MTTCSRQFTSSSSMKGSCGIGGGIGGGSSRISSVLAGGSCRAPSTYGGGLSVSSRFSSGGACGLGGGYGG
 GFSSSSSFSGFGGGYGGGLGAGFGGGLGAGFGGGFAGGDGLLVGSEKVTMQNLNDRLASYLKVRAL
 ANADLEVKIRDWYQRQRPSEIKDYSPYFKTIEDLRNKIIAATIENAQPILQIDNARLAADDFRTKYEH
 ALRQTV EADVNGLRRLDELTLARTDLEMQIEGLKEELAYLRKNHEEMLALRGQTGGD VNVEMDAAPGV
 DLSRILNEMRDQYEQMAEKNRRDAETWFLSKTEELNKEVASNSELVQSSRSEVTELRRLQGLEIELQS
 QLSMKASLENSLEETKGRYCMQLSQQIQLIGSVEEQLAQLRCMEQQSQEYQILLDVKTRLEQEIATYRRL
 LEGEDAHLSSQQASGQSYSSREVFSSSSSSSRQTRPILKEQSSSSFSQGGSS

TRTRPLEQ**KL**ISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6325_g06.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_005557

ORF Size: 1419 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_005557.4](#)

RefSeq Size: 1720 bp

RefSeq ORF: 1422 bp

Locus ID: 3868

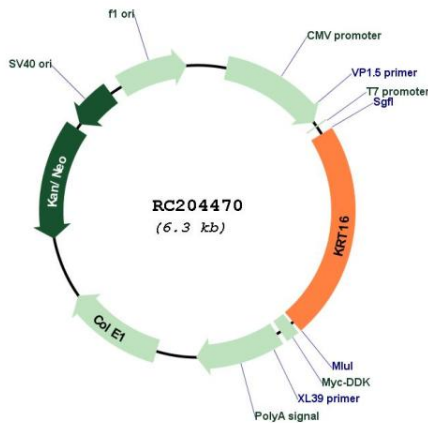
UniProt ID: [P08779](#)

Cytogenetics: 17q21.2

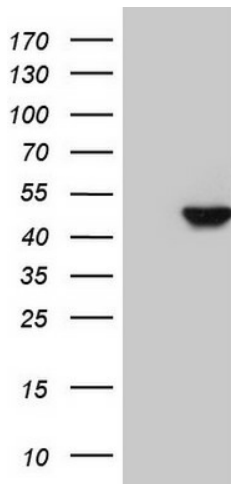
MW: 51.3 kDa

Gene Summary: The protein encoded by this gene is a member of the keratin gene family. The keratins are intermediate filament proteins responsible for the structural integrity of epithelial cells and are subdivided into cytokeratins and hair keratins. Most of the type I cytokeratins consist of acidic proteins which are arranged in pairs of heterotypic keratin chains and are clustered in a region of chromosome 17q12-q21. This keratin has been coexpressed with keratin 14 in a number of epithelial tissues, including esophagus, tongue, and hair follicles. Mutations in this gene are associated with type 1 pachyonychia congenita, non-epidermolytic palmoplantar keratoderma and unilateral palmoplantar verrucous nevus. [provided by RefSeq, Jul 2008]

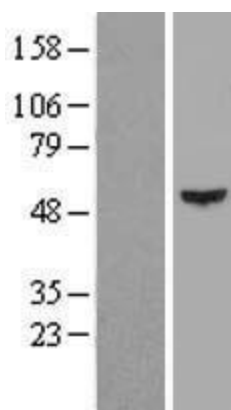
Product images:



Circular map for RC204470



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY KRT16 (Cat# RC204470, 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-KRT16(Cat# [TA808337]). Positive lysates [LY417219] (100ug) and [LC417219] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY417219]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204470 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).