

Product datasheet for **RC212202**

KRT82 (NM_033033) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KRT82 (NM_033033) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KRT82
Synonyms:	Hb-2; HB2; KRTHB2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC212202 representing NM_033033
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGTCGTACCACTCTTTCCAGCCAGGCTCCAGGTGTGGCAGTCAGAGTTTCAGCTCATACTCGGCTGTCA
 TGCCCCGATGGTCACCCACTATGCAGTGAGCAAGGGGCCATGCCGGCCCGGGGGTGGTAGGGCCCTCCG
 AGCTCTGGGCTGCCTTGGCTCACGGAGCCTGTGCAACGTGGGCTTTGGGAGGCCCGGGTAGCCTCCAGG
 TGTGGAGGTACCCTGCCTGGCTTCCGGTACCGACTGGGAGCCACCTGTGGGCTTCTGCCTGCATCACCC
 CTGTCACCATCAATGAGAGCCTGCTGGTCCACTGGCACTGGAGATAGACCCGACTGTGCAGAGGGTAAA
 GAGGGATGAGAAGGAGCAGATCAAGTGCCTCAACAACCGTTTCGCATCTTTCATCAACAAGTCCGTTTC
 CTGGAGCAGAAGAACAAGCTGCTGGAGACCAAGTGAACCTTCATGCAGCAGCAGAGGTGCTGCCAGACCA
 ACATCGAGCCCATCTTCGAGGGCTATATCAGCGCCCTTCGGCGGCAGCTGGACTGTGTGCCGGGACCG
 CGTGAGGCTAGAGTCAGAGCTCTGCAGCCTCCAGGCTGCACTGGAGGGCTACAAGAAAAATACGAAGAG
 GAGCTCTCCCTGCGTCCCTGTGTTGAGAATGAGTTTGTTCCTTGAAGAAGGACGTGGACACAGCCTTCC
 TGATGAAGGCTGACCTGGAGACCAACGCAGAGGCACTCGTGCAGGAGATCGACTTCTGAAAAGCCTGTA
 TGAGGAGGAGATCTGCCTGCTCCAGTCTCAGATCTCTGAGACCTCGGTCAATTGTGAAGATGGACAACAGC
 CGGGAGCTGGACGTGGACGGCATCATCGCTGAGATCAAGGCGCAGTATGACGACATCGCCAGCCGACGA
 AAGCCGAAGCAGAGGCTGGTACCAGTCCCGGTATGAGGAGCTGAGAGTACAGCTGGGAACCACTGTGA
 CAACCTCCGAACCGTAAGAACGAGATCCTGGAATGAATAAACTGATCCAGCGGCTGCAGCAAGAAACC
 GAGAATGTCAAAGCCAGCGCTGCAAACCTGAGGGTGCCATAGCTGAGGCAGAGCAGAGGGCAGGGCGG
 CTCTCAATGATGCAAGTCAAGCTGGCAGGGCTGGAGGAGCTCTGCAGAAGGCCAAGCAGGACATGGC
 CTGCCTGCTCAAGGAATATCAGGAGGTGATGAACCTCAAGCTGGGCTGGACATCGAGATCGCCACCTAC
 AGGCGCCTGCTGGAGGGTGAAGAGCACAGGCTGTGCGAAGGCATCGGGCCGTGAATATCTCAGTGAACA
 GCTCAAAGGCGCCTTCTGTACGAGCCATGTGGGGTCAACAGCCTGTCTCAGCACTGGCGTCTCAG
 GAGCAATGGGGGCTGCAGCATCGTGGGCACTGGTGAACCTATGTCCCCTGCGAGCCCCAGGGGCTACTG
 AGCTGTGGGAGCGGGCGGAAATCCAGCATGACGCTAGGAGCTGGGGCAGCTCCCCAGCCACAAGCAT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC212202 representing NM_033033
 Red=Cloning site Green=Tags(s)

MSYHSFQPGSRCSQSFSSYSVMPRMVTHYAVSKGPCRPGGRGLRALGCLGSRSLCNVGFGRPRVASR
 CGGTLPGFGYRLGATCGPSACITPVTINESLLVPLALEIDPTVQRVKRDEKEQIKLNNRFASFINKVRF
 LEQKNLLETKWNFMQQQRCCQTNIPIFEGYISALRRQLDCVSGDRVLESELCSLQAALLEGYKKKYEE
 ELSLRPCVENEFVALKKDVDTAFLMKADLETNAEALVQEIDFLKSLYEEIICLLQSQISETSVIVKMDNS
 RELDVGIIIAEIKAYDDIASRSKAEAEAWYQCRYEELRVTAGNHCDNLRNRKNEILEMNKLIQRLQOET
 ENVKAQRCKLEGAIAEAEQQGEAALNDAKCLAGLEELQKAKQDMACLLKEYQEVMSKLGDLIEIATY
 RRLLEGEHRLCEGIGPVNISVSSSKGAFLYPCGVSTPVLSTGVLRNSGGCSIVGTGELYVPCPEPQGLL
 SCGSGRKSMTLGAGSSPSHKH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8026_a07.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_033033

ORF Size: 1539 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_033033.4](#)

RefSeq Size: 2681 bp

RefSeq ORF: 1542 bp

Locus ID: 3888

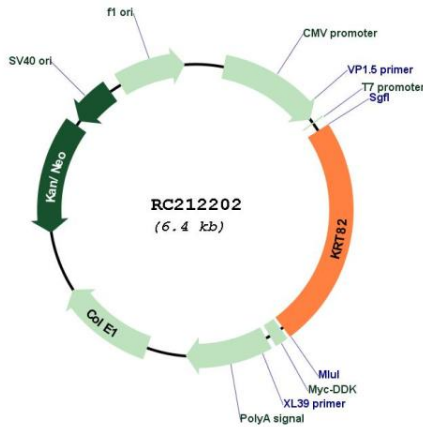
UniProt ID: [Q9NSB4](#)

Cytogenetics: 12q13.13

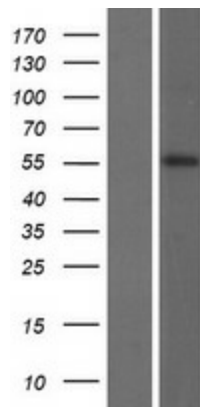
MW: 56.5 kDa

Gene Summary: The protein encoded by this gene is a member of the keratin gene family. As a type II hair keratin, it is a basic protein which heterodimerizes with type I keratins to form hair and nails. The type II hair keratins are clustered in a region of chromosome 12q13 and are grouped into two distinct subfamilies based on structure similarity. One subfamily, consisting of KRTHB1, KRTHB3, and KRTHB6, is highly related. The other less-related subfamily includes KRTHB2, KRTHB4, and KRTHB5. All hair keratins are expressed in the hair follicle; this keratin appears to be a hair cuticle-specific keratin. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC212202



Western blot validation of overexpression lysate (Cat# [LY409792]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212202 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).