

## Product datasheet for **RC215431**

### **KRTHB3 (KRT83) (NM\_002282) Human Tagged ORF Clone**

#### **Product data:**

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids                               |
| Product Name:             | KRTHB3 (KRT83) (NM_002282) Human Tagged ORF Clone |
| Tag:                      | Myc-DDK   |
| Symbol:                   | KRTHB3  |
| Synonyms:                 | EKVP5; Hb-3; HB3; KRTHB3; MNLIX                   |
| Mammalian Cell Selection: | Neomycin  |
| Vector:                   | pCMV6-Entry (PS100001)                            |
| E. coli Selection:        | Kanamycin (25 ug/mL)                              |



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**ORF Nucleotide Sequence:**

>RC215431 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGACCTGTGGCTTCACTCCATAGGCTGTGGTTCGCCCTGAAACTTCAGCTGTGTCTCTGCCTGCG  
 GGCCCGGCCAAGCCGCTGCTGCATCACCGCCGCCCTACCGCGCATCTCTGCTACCGCGCCCTCAC  
 CGGGGGCTTTGGCAGCCACAGCGTGTGCGGGGGCTTCCGCGCGGCTCCTGCGGACGCAGCTTCGGCTAC  
 CGCTCCGGGGGCGTGTGCGGACCCAGCCCCATGCATCACACCGTGTGGTCAACGAGAGCCTCTCA  
 CGCCCTCAACCTGGAGATAGACCCCAACGCGCAGTGCCTGAAGCAGGAGGAGAAGGAGCAGATCAAGTC  
 CCTCAACAGCAGATTGCGGCCCTCATCGACAAGGTGCGCTTCTGGAGCAGCAGAACAAGCTGTGGAG  
 ACAAAGCTGCAGTTCTACAAAAGTGCAGTGTGCCAGAGTAACCTGGAGCCCCGTTTGTGGCTACA  
 TCGAGACTCTGCGGGGGAGGCCGAGTGCCTGGAGGCTGACAGTGGGAGGCTGGCCTCAGAGCTCAACCA  
 CGTGCAGGAGTGTGGAGGGCTACAAGAAGAAGTATGAAGAAGAAGTAGCACTTCGAGCCACAGCAGAG  
 AACGAGTTTGTGGCTCTAAAGAAGGATGTGGACTGTGCCTACCTCCGCAAGTCAACCTGGAGGCCAACG  
 TGGAGGCCCTGATCCAGGAGATTGACTTCTGAGGCGGCTGTACGAGGAGGAGATCCGCATTCTCCAATC  
 CCACATCTCAGACACCTCCGTGGTTGTCAAAGCTGGACAACAGCCGGGACCTGAACATGGACTGCATGGTT  
 GCTGAGATCAAGGCACAGTATGATGACATTGCCACCCGTAGCCGGGCTGAGGCCGAGTCTGGTATCGCA  
 GCAAGTGTGAGGAGATGAAGGCCACAGTATGATCAGGACCGGGAGACCTGCGCCGCCACCAAGGAGGAGAT  
 CAATGAGCTGAACCGCATGATCCAGAGGCTGACAGCCGAGGTGGAGAATGCCAAGTGCAGAACTCCAAG  
 CTGGAGGCCGCGTGGCCAGTCTGAGCAGCAGGTTGAGGCGGCCCTCAGTGTGCCCGCTGCAAGCTGG  
 CCGAGCTGGAGGGCCCTGCAGAAGGCCAAGCAAGACATGGCCTGCCTGATCAGGGAGTACCAGGAGGT  
 GATGAACCTCAAGCTAGGCTGGATATCGAGATCGCCACCTACAGGCGCCTGCTGGAGGGCAGGAGCAG  
 AGGCTGTGTAAGGTGTTGAAGCTGTGAATGTCTGTGTCAGCAGCTCCCGGGGTGGGGTGTGTGCGGGG  
 ACCTCTGCGTGTGCGGCTCCCGGCCGTTGACGGGCAGCGTCTGCAGTCCCCCTGCAACGGGAACCTGGT  
 GGTGAGCACTGGTTTGTGCAAGCCCTGTGGCCAGCTGAACACCACCTGTGGAGGGGGCTCCTGCGGCCAG  
 GGGAGGTAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC215431 protein sequence  
 Red=Cloning site Green=Tags(s)

MTCGFNSIGCGFRPGNFSCVVSACGPRPSRCCITAAAPYRGISCYRGLTGGFGSHSVCGGFRAGSCGRSFGY  
 RSGVCGPSPPCITTVSVNESLLTPLNLEIDPNAQCVKQEEKEQIKSLNSRFAAFIDKVRFLQNNKLE  
 TKLQFYQNECCQSNLEPLFAGYIETLRREAECVEADSGRLASELNHVQEVLEGYKKYEEVALRATAE  
 NEFVALKKDVEDCAYLRKSDLEANVEALIQEIDFLRRLYEEIRILQSHISDTSVVVKLDNSRDLMDCMV  
 AEIKAQYDDIATRSRAEAEISWYRSKCEEMKATVIRHGETLRRTKEEINELNRMIQRLTAEVENAKCQNSK  
 LEAAVAQSEQQGEAALSDARCKLAEELEGALQKAKQDMACLIREYQEVMSKLGLDIEIATYRRLLLEGEEQ  
 RLCEGVEAVNVCVSSSRGGVCGDLVSGSRPVTGVSVCAPCNGNLVVSTGLCKPCQLNTTCGGGSCGQ  
 GRY

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6610\\_f08.zip](https://cdn.origene.com/chromatograms/mk6610_f08.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_002282

**ORF Size:** 1479 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\\_002282.3](#), [NP\\_002273.3](#)

**RefSeq Size:** 1875 bp

**RefSeq ORF:** 1482 bp

**Locus ID:** 3889

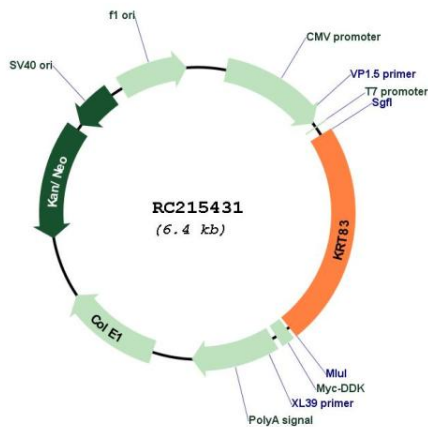
**UniProt ID:** [P78385](#)

**Cytogenetics:** 12q13.13

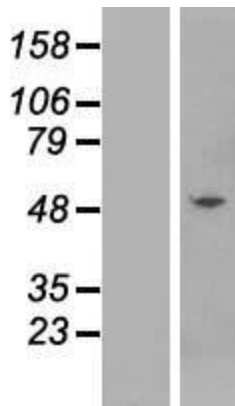
**MW:** 54.2 kDa

**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 hair keratin, as well as KRTHB1 and KRTHB6, is found primarily in the hair cortex. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RC215431



Western blot validation of overexpression lysate (Cat# [LY419434]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215431 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).