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## Product datasheet for RC204500

## Cytokeratin 10 (KRT10) (NM_000421) Human Tagged ORF Clone

## Product data:

Product Type: Expression Plasmids
Product Name: Cytokeratin 10 (KRT10) (NM_000421) Human Tagged ORF Clone

Tag:
Symbol:
Synonyms:
Mammalian Cell
Selection:
Vector:
E. coli Selection:

Myc-DDK
Cytokeratin 10
BCIE; BIE; CK10; EHK; K10; KPP
Neomycin
pCMV6-Entry (PS100001)
Kanamycin ( $25 \mathrm{ug} / \mathrm{mL}$ )

## ORF Nucleotide <br> Sequence:

>RC204500 representing NM_000421.
Blue=ORF Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGTCTGTTCGATACAGCTCAAGCAAGCACTACTCTTCCTCCCGCAGTGGAGGAGGAGGAGGAGGAGGA GGATGTGGAGGAGGAGGAGGAGTGTCATCCCTAAGAATTTCTAGCAGCAAAGGCTCCCTTGGTGGAGGA TTTAGCTCAGGGGGGTTCAGTGGTGGCTCTTTTAGCCGTGGGAGCTCTGGTGGGGGCTGCTTTGGGGGC TCATCAGGTGGCTATGGAGGATTAGGAGGTTTTGGTGGAGGTAGCTTTCGTGGAAGCTATGGAAGTAGC AGCTTTGGTGGGAGTTATGGAGGCAGCTTTGGAGGGGGCAGTTTCGGAGGTGGCAGCTTTGGTGGGGGC AGCTTTGGTGGAGGCGGCTTTGGTGGAGGCGGCTTTGGAGGAGGCTTTGGTGGTGGATTTGGAGGAGAT GGTGGCCTTCTCTCTGGAAATGAAAAAGTAACCATGCAGAATCTGAATGACCGCCTGGCTTCCTACTTG GACAAAGTTCGGGCTCTGGAAGAATCAAACTATGAGCTGGAAGGCAAAATCAAGGAGTGGTATGAAAAG CATGGCAACTCACATCAGGGGGAGCCTCGTGACTACAGCAAATACTACAAAACCATCGATGACCTTAAA AATCAGATTCTCAACCTAACAACTGATAATGCCAACATCCTGCTTCAGATCGACAATGCCAGGCTGGCA GCTGATGACTTCAGGCTGAAGTATGAGAATGAGGTAGCTCTGCGCCAGAGCGTGGAGGCTGACATCAAC GGCCTGCGTAGGGTGCTGGATGAGCTGACCCTGACCAAGGCTGACCTGGAGATGCAAATTGAGAGCCTG ACTGAAGAGCTGGCCTATCTGAAGAAGAACCACGAGGAGGAAATGAAAGACCTTCGAAATGTGTCCACT GGTGATGTGAATGTGGAAATGAATGCTGCCCCGGGTGTTGATCTGACTCAACTTCTGAATAACATGAGA AGCCAATATGAACAACTTGCTGAACAAAACCGCAAAGATGCTGAAGCCTGGTTCAATGAAAAGAGCAAG GAACTGACTACAGAAATTGATAATAACATTGAACAGATATCCAGCTATAAATCTGAGATTACTGAATTG AGACGTAATGTACAAGCTCTGGAGATAGAACTACAGTCCCAACTGGCCTTGAAACAATCCCTGGAAGCC TCCTTGGCAGAAACAGAAGGTCGCTACTGTGTGCAGCTCTCACAGATTCAGGCCCAGATATCCGCTCTG GAAGAACAGTTGCAACAGATTCGAGCTGAAACCGAGTGCCAGAATACTGAATACCAACAACTCCTGGAT ATTAAGATCCGACTGGAGAATGAAATTCAAACCTACCGCAGCCTGCTAGAAGGAGAGGGAAGTTCCGGA GGCGGCGGACGCGGCGGCGGAAGTTTCGGCGGCGGCTACGGCGGCGGAAGCTCCGGCGGCGGAAGCTCC GGCGGCGGCTACGGCGGCGGCCACGGCGGCAGTTCCGGCGGCGGCTACGGAGGCGGAAGCTCCGGCGGC GGAAGCTCCGGCGGCGGCTACGGGGGCGGAAGCTCCAGCGGCGGCCACGGCGGCAGTTCCAGCGGCGGC TACGGTGGTGGCAGTTCCGGCGGCGGCGGCGGCGGCTACGGGGGCGGCAGCTCCGGCGGCGGCAGCAGC TCCGGCGGCGGATACGGCGGCGGCAGCTCCAGCGGAGGCCACAAGTCCTCCTCTTCCGGGTCCGTGGGC GAGTCTTCATCTAAGGGACCAAGATAC
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Protein Sequence: >Peptide sequence encoded by RC204500 Blue=ORF Red=Cloning site Green=Tag(s)

MSVRYSSSKHYSSSRSGGGGGGGGCGGGGGVSSLRISSSKGSLGGGFSSGGFSGGSFSRGSSGGGCFGG SSGGYGGLGGFGGGSFRGSYGSSSFGGSYGGSFGGGSFGGGSFGGGSFGGGGFGGGGFGGGFGGGFGGD GGLLSGNEKVTMQNLNDRLASYLDKVRALEESNYELEGKIKEWYEKHGNSHQGEPRDYSKYYKTIDDLK NQILNLTTDNANILLQIDNARLAADDFRLKYENEVALRQSVEADINGLRRVLDELTLTKADLEMQIESL TEELAYLKKNHEEEMKDLRNVSTGDVNVEMNAAPGVDLTQLLNNMRSQYEQLAEQNRKDAEAWFNEKSK ELTTEIDNNIEQISSYKSEITELRRNVQALEIELQSQLALKQSLEASLAETEGRYCVQLSQIQAQISAL EEQLQQIRAETECQNTEYQQLLDIKIRLENEIQTYRSLLEGEGSSGGGGGRGGGSFGGGYGGGSSGGGSS GGGYGGGHGGSSGGGYGGGSSGGGSSGGGYGGGSSSGGHGGSSSGGYGGGSSGGGGGGYGGGSSGGGSS SGGGYGGGSSSGGHKSSSSGSVGESSSKGPRY TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Sgfl-Mlul

## Restriction Sites:

## Cloning Scheme:

## ACCN:

ORF Size:
OTI Disclaimer:

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 10 ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method: 1. Centrifuge at $5,000 \times g$ for 5 min .
2. Carefully open the tube and add 100 ul 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 5000 xg ) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at $-20^{\circ} \mathrm{C}$. The DNA is stable for at least one year from date of shipping when stored at $-20^{\circ} \mathrm{C}$.

| RefSeq: | NM 000421.2 NP 000412.2 |
| :--- | :--- |
| RefSeq Size: | 2162 bp |
| RefSeq ORF: | 1755 bp |
| Locus ID: | 3858 |
| UniProt ID: | $\underline{\text { P13645 }}$ |
| Cytogenetics: | $17 \mathrm{q21.2}$ |
| MW: | 58.8 kDa |
| Gene Summary: | This gene encodes a member of the type I (acidic) cytokeratin family, which belongs to the <br> superfamily of intermediate filament (IF) proteins. Keratins are heteropolymeric structural <br> proteins which form the intermediate filament. These filaments, along with actin <br> microfilaments and microtubules, compose the cytoskeleton of epithelial cells. Mutations in <br> this gene are associated with epidermolytic hyperkeratosis. This gene is located within a <br> cluster of keratin family members on chromosome 17q21. [provided by RefSeq, Jul 2008] |
|  |  |

## Product images:




HEK293T cells were transfected with the overexpression plasmids of 14 KRT isoforms (from left to right:KRT1, Cat\# [RC223146]; KRT2, Cat\# [RC213030]; KRT3, Cat\# [RC223011]; KRT4, Cat\# [RC220350]; KRT5, Cat\# [RC206870]; KRT6a, Cat\# [RC204328]; KRT7, Cat\# [RC201124]; KRT8, Cat\# [RC209570];KRT9, Cat\# [RC218091]; KRT10, Cat\# RC204500;KRT12, Cat\# [RC224946];KRT13, Cat\# [RC201179];KRT14, Cat\# [RC214907];KRT15, Cat\# [RC201150]) for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-flag antibody (Cat\# [TA180144], 1:1000) or anti-KRT7 mouse monoclonal antibody (Cat\# [TA803333], 1:500).

