

Product datasheet for **RC213030**

Cytokeratin 2 (KRT2) (NM_000423) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cytokeratin 2 (KRT2) (NM_000423) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cytokeratin 2
Synonyms:	CK-2e; K2e; KRT2A; KRT2E; KRTE
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC213030 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGTTGTCAGATCTCTTGCAAATCTCGAGGAAGAGGAGGAGGTGGAGGAGGATTCGGGGCTTCAGCA
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence: >RC213030 protein sequence
 Red=Cloning site Green=Tags(s)

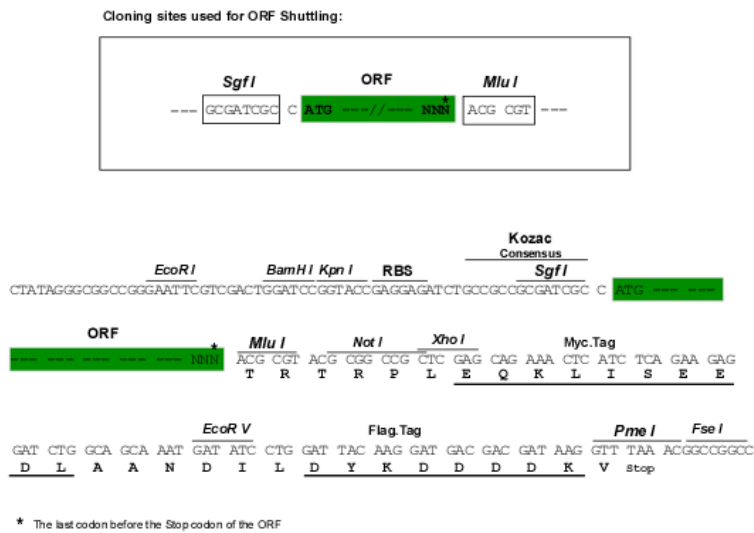
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EVKAQYEEIAQRSKEEAEALYHSKYEELQVTVGRHGD SLKEIKIEISELNRVIQRLQGEIAHVKKQCKNV
QDAIADAEQRGEHALKDARNKLN DLEELQQAKEDLARLLRDYQELMNVKLALDVEIATYRKLLEGE ECR
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GSSVTF SFR
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TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6705_h08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000423

ORF Size: 1917 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_000423.3](#)

RefSeq Size: 2459 bp

RefSeq ORF: 1920 bp

Locus ID: 3849

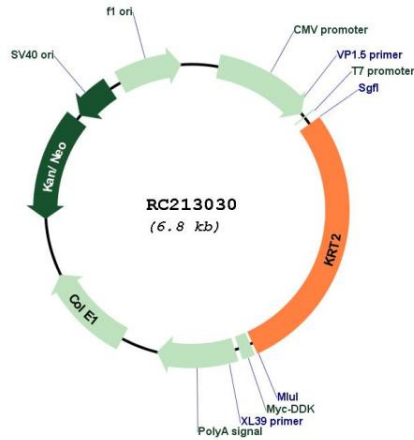
UniProt ID: [P35908](#)

Cytogenetics: 12q13.13

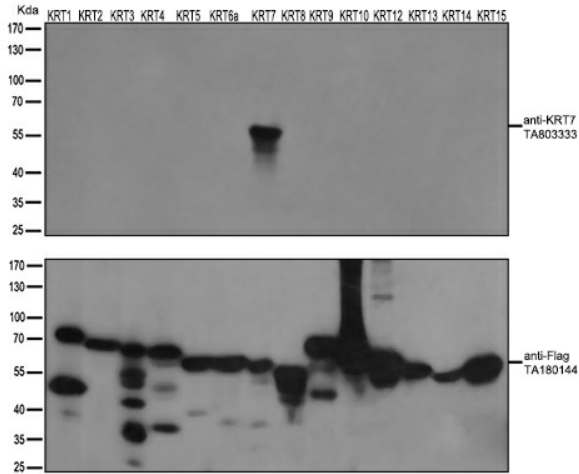
MW: 65.4 kDa

Gene Summary: The protein encoded by this gene is a member of the keratin gene family. The type II cytokeratins consist of basic or neutral proteins which are arranged in pairs of heterotypic keratin chains coexpressed during differentiation of simple and stratified epithelial tissues. This type II cytokeratin is expressed largely in the upper spinous layer of epidermal keratinocytes and mutations in this gene have been associated with bullous congenital ichthyosiform erythroderma. The type II cytokeratins are clustered in a region of chromosome 12q12-q13. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC213030



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).