

## Product datasheet for **RC201124**

### Cytokeratin 7 (KRT7) (NM\_005556) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cytokeratin 7 (KRT7) (NM_005556) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cytokeratin 7
Synonyms:	CK7; K2C7; K7; SCL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC201124 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGTCCATCCACTTCAGCTCCCCGGTATTCACCTCGCGCTCAGCCGCCTTCTCGGGCCGCGGCCAGG  
 TGCCTGAGCTCGCTCGCCCCGGCGGCTTGGCAGCAGCAGCCTCTACGGCCTCGGCGCTCGCGGCC  
 GCGCGTGGCCGTGCGCTCTGCTATGGGGGCCGGTGGGCGCGGCATCCGCGAGGTACCATTAAACAG  
 AGCCTGTGGCCCGCTGCGGCTGGACGCCACCCTCCCTCCAGCGGGTGCAGGAGGAGAGCGAGC  
 AGATCAAGACCCTCAACAACAAGTTTGCCTCCTTCATCGACAAGGTGCGGTTTCTGGAGCAGCAACAA  
 GCTGCTGGAGACCAAGTGGACGCTGCTGCAGGAGCAGAAGTCGGCCAAGAGCAGCCGCTCCAGACATC  
 TTTGAGGCCAGATTGCTGGCCTTCGGGGTCAGCTTGAAGCACTGCAGGTGGATGGGGGCCGCTGGAGG  
 CGGAGCTCGGAGCATGCAGGATGTGGTGGAGGACTTCAAGAATAAGTACGAAGATGAAATTAACCGCCG  
 CACAGCTGCTGAGAATGAGTTTGTGGTGTGAAGAAGGATGTGGATGCTGCCTACATGAGCAAGGTGGAG  
 CTGGAGGCCAAGTGGATGCCCTGAATGATGAGATCAACTTCTCAGGACCCTCAATGAGACGGAGTTGA  
 CAGAGCTGCAGTCCCAGATCTCCGACACATCTGTGGTGTGTCCATGGACAACAGTGCCTCCCTGGACCT  
 GGACGGCATCATCGCTGAGGTCAAGGCACAGTATGAGGAGATGGCCAAATGCAGCCGGGCTGAGGCTGAA  
 GCCTGGTACCAGACCAAGTTTGAAGCCCTCCAGGCCAGGCTGGGAAGCATGGGGACGACCTCCGGAATA  
 CCCGGAATGAGATTTAGAGATGAACCGGGCCATCCAGAGGCTGCAGGCTGAGATCGACAACATCAAGAA  
 CCAGCGTGCCAAGTTGGAGGCCCATTCGCGAGGCTGAGGAGCGTGGGAGCTGGCGCTCAAGGATGCT  
 CGTGCCAAGCAGGAGGAGCTGGAAGCCGCCCTGCAGCGGGCCAAGCAGGATATGGCACGGCAGCTGCGTG  
 AGTACCAGAACTCATGAGCGTGAAGCTGGCCCTGGACATCGAGATCGCCACCTACCGCAAGCTGCTGGA  
 GGGCAGGAGAGCCGTTGGCTGGAGATGGAGTGGGAGCCGTGAATATCTCTGTGATGAATTCCTGCTG  
 GGCAGTAGCAGTGGCGGTGGCATTGGGCTGACCCTCGGGGAACCATGGGAGCAATGCCCTGAGCTTCT  
 CCAGCAGTGGCGTCTGGGCTCCTGAAGGCTTATCCATCCGGACCGCATCCGCCAGTGCAGGAGTGC  
 CCGCGAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC201124 protein sequence  
 Red=Cloning site Green=Tags(s)

MSIHFSSPVFTSRSAFSGRGAQVRLSSARPGGLGSSSLYGLGASRPVAVRSAYGGPVGAGIREVTINQ  
 SLLAPLRDADPSLQVRQEESEQIKTLNKFASFIDKVRFLQKQKLLKWTLLQEQKSAKSSRLPDI  
 FEAQIAGLRGQLEALQVDGGRLEAELRSMQDVVEDFKNKYEDEINRRTAENEFVVLKQVDAAYMSKVE  
 LEAKVDALNDEINFLRRLNETELTELQSQISDTSVVLSDNSRSLDLDGIIAEVKAQYEEMAKCSRAEAE  
 AWYQTKFETLQAQAGKHGDDLNRTRNEISEMNRAIQRLQAEIDNIKNQRAKLEAAIAEAEERGELALKDA  
 RAKQEELEAALQRAKQDMARQLREYQELMSVKLALDIEIATYRKLLEGEESRLAGDVGAVNISVMNSTG  
 GSSSGGGIGLTLGGTMGSNALSFSSSAGPGLLKAYSIRTASARRSARD

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6150\\_c08.zip](https://cdn.origene.com/chromatograms/mk6150_c08.zip)

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_005556

**ORF Size:** 1407 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_005556.2](#)

**RefSeq Size:** 1753 bp

**RefSeq ORF:** 1410 bp

**Locus ID:** 3855

UniProt ID: [P08729](#)

Cytogenetics: 12q13.13

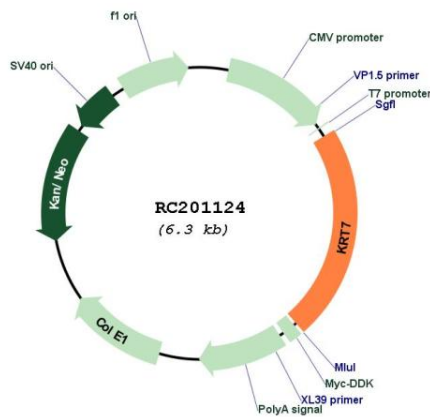
Domains: filament

Protein Families: ES Cell Differentiation/IPS

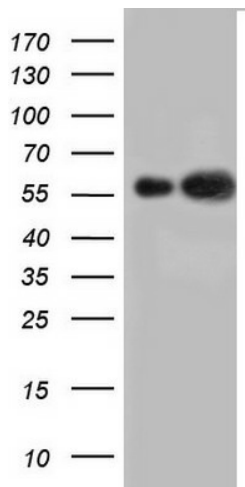
MW: 51.4 kDa

**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 specifically expressed in the simple epithelia lining the cavities of the internal organs and in the gland ducts and blood vessels. The genes encoding the type II cytokeratins are clustered in a region of chromosome 12q12-q13. Alternative splicing may result in several transcript variants; however, not all variants have been fully described. [provided by RefSeq, Jul 2008]

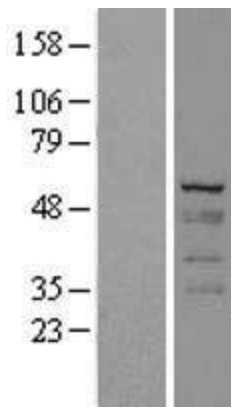
**Product images:**



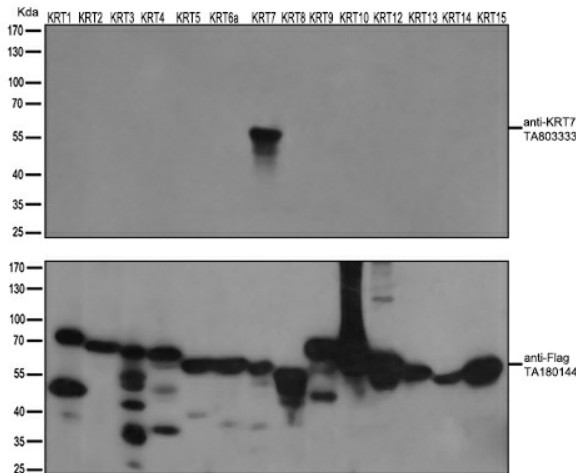
Circular map for RC201124



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY KRT7 (Cat# RC201124, 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-KRT7(Cat# [TA803077]).



Western blot validation of overexpression lysate (Cat# [LY401707]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201124 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



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).