

Product datasheet for **RG204328**

KRT6A (NM_005554) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KRT6A (NM_005554) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	KRT6A
Synonyms:	CK-6C; CK-6E; CK6A; CK6C; CK6D; K6A; K6C; K6D; KRT6C; KRT6D; PC3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG204328 representing NM_005554
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCAGCACATCCACCACCATCAGGAGCCACAGCAGCAGCCGCCGGGTTTCAGTGCCAGCTCAGCCA
 GGCTCCCTGGGGTCAGCCGCTCTGGCTTCAGCAGCGTCTCCGTGTCCCGCTCCAGGGGCAGTGTTGGCCT
 GGGTGGTGCATGTGGAGGAGCTGGCTTTGGCAGCCGAGTCTGTATGGCCTGGGGGGCTCCAAGAGGATC
 TCCATTGGAGGGGGCAGCTGTGCCATCAGTGGCGGCTATGGCAGCAGAGCCGAGGCAGCTATGGCTTTG
 GTGGCGCCGGGAGTGGATTTGGTTTCGGTGGTGGAGCCGCATTGGCTTTGGTCTGGGTGGTGGAGCCGG
 CCTTGCTGGTGGCTTTGGGGGCCCTGGCTTCCCTGTGTGCCCCCTGGAGGCATCCAAGAGGTACCCGTC
 AACCAGAGTCTCCTGACTCCCTCAACCTGCAATCGATCCACCATCCAGCGGTGCGGGCCGAGGAGC
 GTGAACAGATCAAGACCCTCAACAACAAGTTGCCTCCTTCATCGACAAGGTGCGGTTCTGGAGCAGCA
 GAACAAGTTCTGGAACAAAGTGGACCCTGCTGCAGGAGCAGGGCACCAGACTGTGAGGCAGAACCTG
 GAGCCGTTGTTTCAGCAGTACATCAACAACCTCAGGAGGCAGCTGGACAGCATTGTCTGGGGAACGGGGCC
 GCCTGGACTCAGAGCTCAGAGGCATGCAGGACCTGGTGGAGGACTTCAAGAACAATATGAGGATGAAAT
 CAACAAGCGCACAGCAGCAGAGAATGAATTTGTGACTCTGAAGAAGGACGTGGATGCTGCCTACATGAAC
 AAGGTTGAACTGCAAGCCAAGGCAGACACTCTCACAGACGAGATCAACTTCTGAGAGCCTTGTATGATG
 CAGAGCTGTCCCAGATGCAGACCCACATCTCAGACACATCTGTGGTGTCTCCATGGACAACAACCGCAA
 CCTGGACCTGGACAGCATCATCGCTGAGGTCAAGGCCAATATGAGGAGATTGCTCAGAGAAGCCGGGT
 GAGGCTGAGTCTGGTACCAGACCAAGTACGAGGAGCTGCAGGTACAGCAGGCAGACATGGGGACGACC
 TGCGCAACACCAAGCAGGAGATTGCTGAGATCAACCGCATGATCCAGAGGCTGAGATCTGAGATCGACCA
 CGTCAAGAAGCAGTGCGCCAACCTGCAGGCCGCCATTGCTGATGCTGAGCAGCGTGGGGAGATGGCCCTC
 AAGGATGCCAAGAACAAGCTGGAAGGGCTGGAGGATGCCCTGCAGAAGGCCAAGCAGGACCTGGCCCGGC
 TGCTGAAGGAGTACCAGGAGCTGATGAATGTCAAGCTGGCCCTGGACGTGGAGATCGCCACCTACCGCAA
 GCTGCTGGAGGTGAGGAGTGCAGGCTGAATGGCAAGGCGTTGGACAAGTCAACATCTCTGTGGTGCAG
 TCCACCGTCTCCAGTGGCTATGGCGGTGCCAGTGGTGTGGCAGTGGCTTAGGCCTGGGTGGAGGAAGCA
 GCTACTCTATGGCAGTGGTCTTGGCGTTGGAGGTGGCTTCAGTTCAGCAGTGGCAGAGCCATTGGGGG
 TGGCCTCAGCTCTGTTGGAGGCGGCAGTCCACCATCAAGTACACCACCACCTCCTCCTCAGCAGGAAG
 AGCTATAAGCAC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG204328 representing NM_005554
 Red=Cloning site Green=Tags(s)

MASTSTTIRSHSSRRGFSASSARLPGVSRSGFSSVSVSRSGSGLGGACGGAGFGSRSLYGLGGSKR
 SIGGGSCAISGGYGSRAAGSYGFGGAGSGFGGGAGIGFGLGGAGLAGFGGPGFPVCPGGIIEVTV
 NQSLLTPLNLQIDPTIQRVRAEEREQIKTLNNKFASFIDKVRFLQNNKVLTKWTLTQEQGKTIVRQNL
 EPLFEQYINNLRRLDSIVGERGRDLSELRGMQDLVEDFNKYEDEINKRTAAENEFVTLKDDVDAAYMN
 KVELQAKADTLTDEINFLRALYDAELSQMQTHISDTSVVLMDNRRNLDLSIIAEVKAQYEEIAQRSRA
 EAESWYQTKYEELQVTAGRHGDDLNTKQEIIEINRMIQRLRSEIDHVKKQCANLQAAIADAEQRGEMAL
 KDAKNKLEGLDALQKAKQDLARLLKEYQELMNVKLALDVEIATYRKLLGEEECRLNGEYGVQVNISSVQ
 STVSSGYGGASGVGSGGLGLGGSSYSYGSGLGVGGGFSSSSGRAIGGGLSSVGGGSSTIKYTTTSSSRK
 SYKH

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_005554

ORF Size: 1692 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_005554.3](#), [NP_005545.1](#)

RefSeq Size: 2450 bp

RefSeq ORF: 1695 bp

Locus ID: 3853

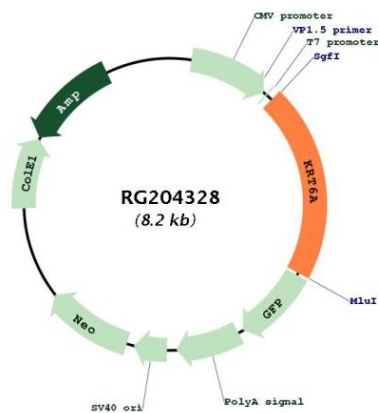
UniProt ID: [P02538](#)

Cytogenetics: 12q13.13

Domains: filament

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. As many as six of this type II cytokeratin (KRT6) have been identified; the multiplicity of the genes is attributed to successive gene duplication events. The genes are expressed with family members KRT16 and/or KRT17 in the filiform papillae of the tongue, the stratified epithelial lining of oral mucosa and esophagus, the outer root sheath of hair follicles, and the glandular epithelia. This KRT6 gene in particular encodes the most abundant isoform. Mutations in these genes have been associated with pachyonychia congenita. In addition, peptides from the C-terminal region of the protein have antimicrobial activity against bacterial pathogens. The type II cytokeratins are clustered in a region of chromosome 12q12-q13. [provided by RefSeq, Oct 2014]

Product images:



Circular map for RG204328