

Product datasheet for RC220112

Trichohyalin (TCHH) (NM_007113) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Trichohyalin (TCHH) (NM_007113) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Trichohyalin
Synonyms:	THH; THL; TRHY; UHS3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC220112 ORF sequence, codon optimized . Due to the complexity of NM_007113, the ORF clone is codon optimized for mammalian Expression. The nucleotide sequence differs from the reference sequence, yet the amino acid sequence remains identical.

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGTCACCCCTTCTTCGATCAATTTGCGACATCACCGAAATTTCAATCAGTACGTGTACACGATTGTG
ATGGAGCCGCACTGACCAAGAAGGACCTCAAAAACCTGCTGGAACGCGAGTTCGGAGCCGTGCTCCGGCG
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GTTTGGACGAAGAAAAAGGGCGCGGTGTACGGCAAAGAGTCATTGTTGCAGGACCGACGGCAGGAGGA
AGACCAAGGGCGGTTTCGAGCCTAGGGATAGACAACCTGAGGAAGAGCCAGGGCAGCGCAGGCGACAGAAG
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AGCAGAGGAAGAGCAACTCCAGTCTTGCAAGGGGCACGAGACTGAGGAGTTCCTGACGAGGAGCAACTG
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AAGACCGAGTGTTCAGGAGGAAGAGGAAAAAGAGTGGAGGAAGCGGAAACAGTCTGAGGAAAGAAGA
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AGCAGCAGCTGCCACGGGAGCAGCAACTCCGCCGGGAGCAGCAGTTGCGCGGGAGCAGCAGCTGAGACG
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 GGAGCCAAAGAACAGAGACGAGATCAAAGTGGCGCTGGCAGCTTGAGGAGGAAAGGAAAGCCGACGCCA
 TACTGTACGCAAGCCCGCACTTCAGGAACAGCTGCGCAAGGAACAGCAGCTGCTGCAAGAGAAAGAG
 GAAGAGCTGCAGCGGGAAGAGAGAGAAAAAGGCGGCGACAGGAGCAGGAAAGGCACTACAGGGAGGAGG
 AGCAGCTTCAACAGGAAGAAGAGCAGCTGCTGCGGGAGGAGCGGGAAGAGCGGAGCGCAGGAAAGGGA
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 GTTTCTGGAGGAAGAGCAACAGCTCAGACAGGAGCGCCATCGGAAGTTTAGGGAGGAGGAACAGCTGCTC
 CAAGAGCGGAGGAGCAGCAGCTGCATCGACAGGAACCGATCGGAAATCTTGGAGGAAGAGCAGCAGC
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 TACAGGTGGGAGGAGGAACAGCTGCAGCTTGGAGCAGGAACAACGCCTGAGGCAGGAAAGGGATCGGC
 AGTATAGAGCCGAGGAACAGTTCCGCACGAGGAGAAATCCCGCGAGAGGAGCAGGAGCTGTGGCAGGA
 GGAGGAGCAAAAACGAAGGAAGAACGAGAGAGAAAATGCGAGAGGAACACATCCGACAGCAGCAAAAAG
 GAGGAACAGAGACATAGCAGGTTGGGGAATTAATCTCAAGAGGGGAAGGGGCACGGCAGGCTGCTCG
 AGCCTGGTACTACCAGTTCCGAGTGTCCCGTGCATCTTACCAGTGTACGAATACATTCAAGAGCA
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC220112 representing NM_007113
 Red=Cloning site Green=Tags(s)

MSPLLRNICDITEIFNQYVSHDCGAALTKKDLKNLLEREFGAVLRRPHDPKTVDLILELLDLSNGRVD
 FNEFLIFKVAQACYALGQATGLDEEKRARCDGKESLLQDRRQEEDQRRFEPDRDQLEEEEPGQRRRQK
 RQEQERELAEQEEQSEKQERLEQRDRQRDEELWRQRQEWQEREERRAEELQSCKGHETEEFPDEEQL
 RRRELELRRKGREEKQQRRRERQDRVFQEEEEKEWRKRETVLRKEEEKLQEEEPQRQRELQEEEEQLRK
 LERQELRRERQEEEQQQLRREQQLRRQEEERREQEEERREQEEERREQEEERREQEEERREQEEERREQ
 LRREQEEERREQQLRREQEEERREQQLRREQQLRREQQLRREQQLRREQQLRREQQLRREQQLRREQQLR
 RELEQLRREQEEERHEQKHEQERREQLKREQEERDQWLKREETERHEQERRKQQLKRDQEEERRERWLK
 LEEERREQERREQQLRREQEEERREQLKREQEERLQQLRSEQQLRREQEEERREQLKREERRELEQ
 ERREQLKREQEERRDQLLKREERRRQQLKREQEERLEQLKREEVERLEQEERREQLKREEPPEERR
 QQLLKSEEQEERRRQQLRREQEEERREQLKREEEEEERLEQLKREHEERREQELAEQEQARERIKSR
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 EELQREERKRRRQEQERQYREEEQQLQEEEQQLREERKRRRQERERQYRKDKKLQQKEEQLLGEEPEK
 RRRQERKKYREEEQQLQEEEQQLREERKRRRQEWERQYRKDELQEEEQQLREERKRRRQERERQY
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 RQSQDQLQHLLGEQQRDREQERRRQQRDRHFPEEQLEEEQKEAKRRDRKSQEEKQLREEREKRR
 RQETDRKFREEEQQLQEREEQPLRRQERDRKFREEEQVRRQERERKFLQEEQQLRQERHRKFREEEQQL
 QEREEQQLHRQERDRKFLEEQQLRRQERDRKFREQLRSQEPERKFLQEEQQLHRQQRKFLQEEQQL
 RRQERGGQRRDRDRKFREEEQQLRQEREEQQLSRQERDRKFRLEEQKVRQEQERKFMEDQQLRRQEGQ
 QQLRQERDRKFRDEQLLQEREEQQLHRQERDRKFLQEEQQLRRQEREEQQLRHDRDRKFRQEEQQLQEGE
 EQQLRRQERDRKFRQEEQQLRRQERERKFLQEEQQLRRQELERKFRQEEQQLRQETEQLRQERERKIL
 EEEQLRPEREEQQLRRQERDRKFRQEEQQLRQEREEQQLRSQESDRKFRQEEQQLRQEREEQQLRQQRDGK
 YRWEEQLQLEEQQLRQERDRQYRAEEQFATQEKSRREEQELWQEEEQKRRQERERKLRREEHRRQK
 EEQRHRQVGEIKSQEGKGHGRLLLEPGTHQFASVPRSSPLYEYIQEQRSQYRP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-Mlul

Cloning Scheme:

ACCN: NM_007113

ORF Size: 5829 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_007113.2](#), [NM_007113.3](#), [NP_009044.2](#)

RefSeq Size: 6995 bp

RefSeq ORF: 5832 bp

Locus ID: 7062

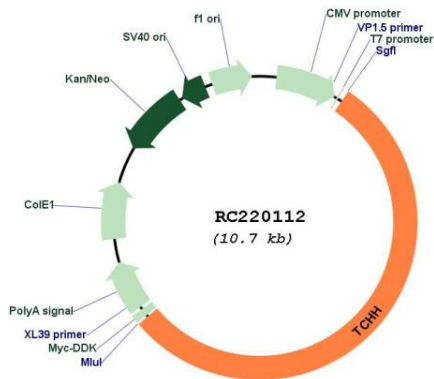
UniProt ID: [Q07283](#)

Cytogenetics: 1q21.3

MW: 253.9 kDa

Gene Summary: The protein encoded by this gene forms crosslinked complexes with itself and keratin intermediate filaments to provide mechanical strength to the hair follicle inner root sheath. The encoded protein also is important for structural integrity of the filiform papillae of the tongue. Defects in this gene are a cause of uncombable hair syndrome. [provided by RefSeq, Feb 2017]

Product images:



Circular map for RC220112