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Product datasheet for SC304590

Hairless (HR) (NM_018411) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Hairless (HR) (NM_018411) Human Untagged Clone
Tag:	Tag Free
Symbol:	HR
Synonyms:	ALUNC; AU; HSA277165; HYPT4; MUHH; MUHH1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

Fully Sequenced ORF:

>SC304590 representing NM_018411.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGAGAGTACGCCCAGCTTCCTGAAGGGCACCCCAACCTGGGAGAAGACGGCCCCAGAGAACGGCATC
GTGAGACAGGAGCCCGGCAGCCCGCCTCGAGATGGACTGCACCATGGGCCGCTGTGCCTGGGAGAGCCT
GCTCCCTTTTGGAGGGGCGTCCTGAGCACCCCAGACTCCTGGCTTCCCCCTGGCTTCCCCCAGGGCCCC
AAGGACATGCTCCCACTTGTGGAGGGCGAGGGCCCCCAGAATGGGGAGAGGAAGGTCAACTGGCTGGGC
AGCAAAGAGGGACTGCGCTGGAAGGAGGCCATGCTTACCCATCCGCTGGCATTCTGCGGGCCAGCGTGC
CCACCTCGCTGTGGCCCCCTGATGCCTGAGCATAGTGGTGGCCATCTCAAGAGTGACCCTGTGGCCTTC
CGGCCCTGGCACTGCCCTTTCCTTCTGGAGACCAAGATCCTGGAGCGAGCTCCCTTCTGGGTGCCCACC
TGCTTGCCACCCTACCTAGTGTCTGGCCTGCCCCCAGAGCATCCATGTGACTGGCCCCTGACCCCGCAC
CCCTGGGTATACTCCGGGGGCCAGCCCAAAGTGCCCTCTGCCTTCAGCTTAGGCAGCAAGGGCTTTTAC
TACAAGGATCCGAGCATTCCCAGGTTGGCAAAGGAGCCCTTGGCAGCTGCGGAACCTGGGTTGTTTGGC
TTAAACTCTGGTGGGCACCTGCAGAGAGCCGGGGAGGCCGAACGCCCTTCACTGCACCAGAGGGATGGA
GAGATGGGAGCTGGCCGGCAGCAGAATCCTTGCCCGCTCTTCCTGGGGCAGCCAGACACTGTGCCCTGG
ACCTCCTGGCCCGCTTGTCCCCCAGGCCTTGTTCATACTCTTGGCAACGTCTGGGCTGGGCCAGGCGAT
GGGAACCTTGGGTACCAGCTGGGGCCACCAGCAACACCAAGGTGCCCCTCTCCTGAGCCGCCTGTCACC
CAGCGGGGCTGCTGTTCATCCTACCCACCCACTAAAGGTGGGGGTCTTGGCCCTTGTGGGAAGTGCCAG
GAGGGCCTGGAGGGGGGTGCCAGTGGAGCCAGCGAACCCAGCGAGGAAGTGAACAAGGCCTCTGGCCCC
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GAATGTCCACGCGGCTGCCCTGAGGTCGAGGAGAGGCCGGTTGCTCGGCTCCGGGCCCTCAAAAGGGCA
GGCAGCCCCGAGGTCCAGGGAGCAATGGGCAGTCCAGCCCCCAAGCGGCCACCGGACCCTTTTCCAGGC
ACTGCAGAACAGGGGGCTGGGGGTTGGCAGGAGGTGCGGGACACATCGATAGGGAACAAGGATGTGGAC
TCGGGACAGCATGATGAGCAGAAAGGACCCCAAGATGGCCAGGCCAGTCTCCAGGACCCGGGACTTCAG
GACATACCATGCCTGGCTCTCCCTGCAAAACTGGCTCAATGCCAAAGTTGTGCCCAGGCAGCTGGAGAG

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GGAGGAGGGCACGCCTGCCACTCTCAGCAAGTGCGGAGATCGCCTCTGGGAGGGGAGCTGCAGCAGGAG
GAAGACACAGCCACCAACTCCAGCTCTGAGGAAGGCCCAGGGTCCGGCCCTGACAGCCGGCTCAGCACA
GGCCTCGCCAAGCACCTGCTCAGTGGTTTGGGGGACCGACTGTGCCGCCTGCTGCGGAGGGAGCGGGAG
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TGCTGCAGCCGTTGCCACCATGGACTCTTCAACACCCACTGGCGATGTCCCCGCTGCAGCCACCGGCTG
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CAGGCTTTGGCAGAGCTGAGCACTGCAATGCACCAGGTCTGGGTCAAGTTTGATATCCGGGGGCACTGC
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ACGCCCCCAACTCCACAACCTTCCTGCAATGGCGACACCCACAGGACCAAGAGCATCAAAGAGGAGACC
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GTCACTCCGGCCCTGCCCAGTGATGACCGCATCACCAACATCCTGGACAGCATTATCGCACAGGTGGTG
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GGAAAACTCAACCTGGCTTCCTACCTCCCACCGGGCCTTGCCCTGCGTCCACTGGAGCCCCAGCTCTGG
GCAGCCTATGGTGTGAGCCCGCACCGGGGACACCTGGGGACCAAGAACCTCTGTGTGGAGGTGGCCGAC
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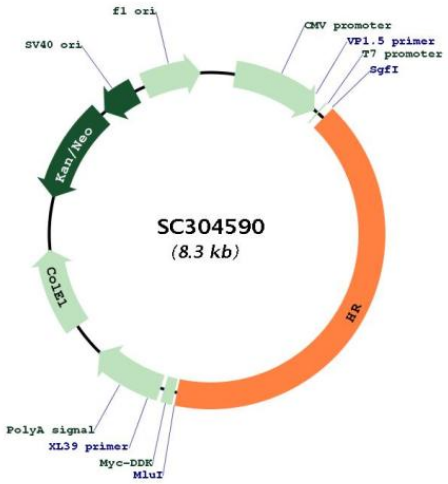
TCAGGCCTGGACGGGGAGGGGCTCTGGTCTCCGGGCAGCCAGGTCAGCACTGTGTGGCACGTGTTCCGG
GCACAGGACGCCCAGCGCATCCGCCGCTTTCTCCAGATGGTGCAGGGCCTGGTGAGCACAGTCAGCGTC
ACTCAGCACTTCCTCTCCCCTGAGACCTCTGCCCTCTCTGCTCAGCTCTGCCACCAGGGACCCAGCCTT
CCCCCTGACTGCCACCTGCTTTATGCCCAGATGGACTGGGCTGTGTTCCAAGCAGTGAAGGTGGCCGTG
GGGACATTACAGGAGGCCAAATAG
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: SgfI-MluI

Plasmid Map:



ACCN: NM_018411

Insert Size:	3405 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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_018411.4
RefSeq Size:	5363 bp
RefSeq ORF:	3405 bp
Locus ID:	55806
UniProt ID:	O43593
Cytogenetics:	8p21.3
Protein Families:	Druggable Genome, Transcription Factors
MW:	121.9 kDa

Gene Summary: This gene encodes a protein that is involved in hair growth. This protein functions as a transcriptional corepressor of multiple nuclear receptors, including thyroid hormone receptor, the retinoic acid receptor-related orphan receptors and the vitamin D receptors, and it interacts with histone deacetylases. The translation of this protein is modulated by a regulatory open reading frame (ORF) that exists upstream of the primary ORF. Mutations in this upstream ORF cause Marie Unna hereditary hypotrichosis (MUHH), an autosomal dominant form of genetic hair loss. Mutations in this gene also cause autosomal recessive congenital alopecia and atrichia with papular lesions, other diseases resulting in hair loss. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2014]
Transcript Variant: This variant (2) lacks an alternate in-frame exon, compared to variant 1, resulting in a protein (isoform 2) that has a shorter C-terminus, compared to isoform 1.
Sequence Note: This RefSeq record represents the hairless protein encoded by the primary ORF. Four upstream ORFs (U1HR-U4HR), which may regulate translation of the primary ORF as described in PMID:19122663, are also annotated on this sequence.