

Product datasheet for **RG213114**

QRICH1 (NM_017730) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	QRICH1 (NM_017730) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	QRICH1
Synonyms:	AB-DIP; VERBRAS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG213114 representing NM_017730
 Red=Cloning site Blue=ORF Green=Tags(s)

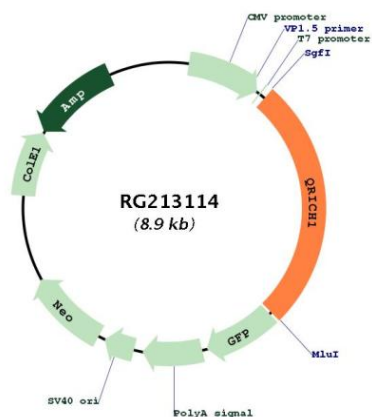
TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAATAATTCCTAGAGAACACCATCTCCTTTGAAGAGTACATCCGAGTAAAGGCAGGTCTGTCCCGC
 AACACAGGATGAAGGAATTTCTGGACTCACTGGCCTCTAAGGGGCCAGAAGCCCTTCAGGAGTCCAGCA
 GACAGCCACCACTACCATGGTGTACCAACAGGGTGGAACTGCATATACAGACAGCACTGAAGTGGCT
 GGGTCTTTGCTTGAACCTGCCTGTCCAGTACCACCAAGTGTTCAGCCACAAACCAGCAAGAACAGCAGA
 TCCAGGTTTCAGCAGCCGACGAGGTTCCAGTCCAGGTGCAGGTACAGCAGTCTCCGCAACAGGTCTCGGC
 TCAGCTCTCCCCACAACCTACCGTTCCACAGCCTACTGAGCAACCCATCCAGGTCCAGGTGCAGATCCAA
 GGCCAGGCACCACAGTACGACGCCCCCTCATTACAGCCCGTCTCTGCAGAGTCCAGTCCCTCGCAGC
 TGCAAGCAGCTCAGATCCAGGTGCAGCAGTGAAGCAGCCAGCAGATCCAGGTGCAGAAATCCCGGA
 GGAGCACATCCCACATCAGCAAATCCAGGCTCAGCTGGTGGCTGGCCAGTCTTTGCTGGTGGTCAGCAG
 ATCCAAATCCAGACCGTGGGTGCCCTTTCCCCACCACCATCCAGCAGGGCTCACCCCGGAAGGGGAGC
 GGCGGGTTGGCACGGCCAGTGTCTCCAACCAAGTGAAGAAGCGCAAAGTGGACATGCCCATCACTGTGTC
 CTACGCCATCTCAGGGCAGCCGGTGGCCACCGTGTGGCCATTCCACAGGGCCAGCAGCAGAGTTATGTG
 TCTTTGAGGCCAGACTTACTGACAGTAGACAGTGGCCACCTGTACAGTGGCACTGGGACCACTTAGGCC
 CTACAGGAGAACTGGACCATCCCTGTTTATTCTGCCAGCCCCGGGGGACCCCTCAGCAGCAGAGCAT
 TACCCACATTGCCATCCCCAGGAAGCCTACAACGCAGTTCACGTCAAGTGGCTCACCCACAGCCCTGGCA
 GCTGTTAAGCTGGAGGATGACAAGGAGAAGATGGTGGCCACCACATCTGTAGTAAAAACTCCCATGAAG
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 CTTGTTACAGTCAAACCTGTCAGGTTGCTGAAGTTGAACCACAGTACAGCCACAGCCTTCCCCAGAACT
 TCTGCTTCAAATTTCTTTGAAGCCAGAAGAAGGGCTTGAAGTATGGAAAACTGGGCCAGACCAAGAAT
 GCTGAACTAGAGAAGGATGCTCAGAACAGATTGGCACCCATTGGGAGGCGCCAAGTGTGCGATTCCAGG
 AAGATCTCATCTCCTCTGCTGTGGCAGAGTTGAATTATGGGCTCTGTCTAATGACACGGGAAGCTCGAAA
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 GAAAATGGAAGGGTAGATGACATTTTCTCCGATCTTTATTATGTTTCGGTTCACGGAGTGGCTACATGAAG
 TTCTGAAGGATGTTACAGCCCCGGTCACTCCACTTGGCTATGTCTTGCCAGCCAGTCACTGAGGAGAT
 GCTATGGGAGTGAAGCAGCTTGGGGCTCACTCCCCCTCCACCTTGTGACCACCCTCATGTTCTTTAAT
 ACCAAGTACTTCTATTGAAGACAGTGGACCAGCAGATGAAGCTGGCCTTCTCCAAGTCTTTCGACAGA
 CAAAGAAGAACCCTCTAATCCCAAGGATAAAAGCAGCAGATATCCGGTACTTGAAGGCCCTTGGAAATACA
 CCAGACTGGCCAGAAAGTTACAGATGACATGTATGCAGAACAGACGAAAAATCCAGAGAATCCATTGAGA
 TGTCCCATCAAGCTCTATGATTTCTACCTTTCAAATGCCCCAGAGTGTGAAAGGCCGGAATGACACCT
 TTTACCTGACACCTGAGCCAGTGGTGGCCCCAACAGCCCAATCTGGTACTCAGTCCAGCCTATCAGCAG
 AGAGCAGATGGGACAAATGCTGACGCGGATCCTGGTGATAAGAGAAATTCAGGAGGCCATCGCAGTGGCC
 AATGCAAGCACTATGCAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

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:	<ol style="list-style-type: none">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:	<u>NM_017730.3</u> , <u>NP_060200.2</u>
RefSeq Size:	3331 bp
RefSeq ORF:	2331 bp
Locus ID:	54870
UniProt ID:	<u>Q2TAL8</u>
Cytogenetics:	3p21.31
Protein Families:	Druggable Genome
Gene Summary:	Transcriptional regulator that acts as a mediator of the integrated stress response (ISR) through transcriptional control of protein homeostasis under conditions of ER stress (PubMed:33384352). Controls the outcome of the unfolded protein response (UPR) which is an ER-stress response pathway (PubMed:33384352). ER stress induces QRICH1 translation by a ribosome translation re-initiation mechanism in response to EIF2S1/eIF-2-alpha phosphorylation, and stress-induced QRICH1 regulates a transcriptional program associated with protein translation, protein secretion-mediated proteotoxicity and cell death during the terminal UPR (PubMed:33384352). May cooperate with ATF4 transcription factor signaling to regulate ER homeostasis which is critical for cell viability (PubMed:33384352). Upregulates CASP3/caspase-3 activity in epithelial cells under ER stress. Central regulator of proteotoxicity associated with ER stress-mediated inflammatory diseases in the intestines and liver (PubMed:33384352). Involved in chondrocyte hypertrophy, a process required for normal longitudinal bone growth (PubMed:30281152).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG213114