

## Product datasheet for RC211088L4V

## OriGene Technologies, Inc.

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## QRICH1 (NM\_198880) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

Product Type: Lentiviral Particles

**Product Name:** QRICH1 (NM\_198880) Human Tagged ORF Clone Lentiviral Particle

Symbol: QRICH1

**Synonyms:** AB-DIP; VERBRAS

**Mammalian Cell** 

- · ·

Puromycin

Selection: Vector:

pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

**ACCN:** NM\_198880 **ORF Size:** 2328 bp

**ORF Nucleotide** 

OTI Disclaimer:

The ORF insert of this clone is exactly the same as(RC211088).

Sequence:

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.

**RefSeg:** NM 198880.1

 RefSeq Size:
 3271 bp

 RefSeq ORF:
 2331 bp

 Locus ID:
 54870

 UniProt ID:
 Q2TAL8

 Cytogenetics:
 3p21.31

**Protein Families:** Druggable Genome

MW: 86.4 kDa







## **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]