

## **Product datasheet for TP313114**

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

### QRICH1 (NM\_017730) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human glutamine-rich 1 (QRICH1), transcript variant 1, 20 μg

Species: Human Expression Host: HEK293T

Expression cDNA Clone or AA Sequence: >RC213114 protein sequence Red=Cloning site Green=Tags(s)

MNNSLENTISFEEYIRVKARSVPQHRMKEFLDSLASKGPEALQEFQQTATTTMVYQQGGNCIYTDSTEVA GSLLELACPVTTSVQPQTQQEQQIQVQQPQQVQVQVQVQVQSPQQVSAQLSPQLTVHQPTEQPIQVQVQIQ GQAPQSAAPSIQTPSLQSPSPSQLQAAQIQVQHVQAAQQIQAAEIPEEHIPHQQIQAQLVAGQSLAGGQQ IQIQTVGALSPPPSQQGSPREGERRVGTASVLQPVKKRKVDMPITVSYAISGQPVATVLAIPQGQQQSYV SLRPDLLTVDSAHLYSATGTITSPTGETWTIPVYSAQPRGDPQQQSITHIAIPQEAYNAVHVSGSPTALA AVKLEDDKEKMVGTTSVVKNSHEEVVQTLANSLFPAQFMNGNIHIPVAVQAVAGTYQNTAQTVHIWDPQQ QPQQQTPQEQTPPPQQQQQQQQQQVTCSAQTVQVAEVEPQSQPQPSPELLLPNSLKPEEGLEVWKNWAQTKN

AELEKDAQNRLAPIGRRQLLRFQEDLISSAVAELNYGLCLMTREARNGEGEPYDPDVLYYIFLCIQKYLF ENGRVDDIFSDLYYVRFTEWLHEVLKDVQPRVTPLGYVLPSHVTEEMLWECKQLGAHSPSTLLTTLMFFN TKYFLLKTVDQHMKLAFSKVLRQTKKNPSNPKDKSTSIRYLKALGIHQTGQKVTDDMYAEQTENPENPLR CPIKLYDFYLFKCPQSVKGRNDTFYLTPEPVVAPNSPIWYSVQPISREQMGQMLTRILVIREIQEAIAVA

NASTMH

**TRTRPL**EQKLISEEDLAANDILDYKDDDDK**V** 

Tag: C-Myc/DDK
Predicted MW: 86.3 kDa

**Concentration:** >0.05 μg/μL as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by conventional

chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.





### QRICH1 (NM\_017730) Human Recombinant Protein - TP313114

Storage: Store at -80°C.

**Stability:** Stable for 12 months from the date of receipt of the product under proper storage and handling

conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** NP 060200

**Locus ID:** 54870

UniProt ID: Q2TAL8, A1L3Z9

RefSeq Size: 3331 Cytogenetics: 3p21.31 RefSeq ORF: 2328

**Synonyms:** AB-DIP; VERBRAS

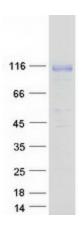
Summary: Transcriptional regulator that acts as a mediator of the integrated stress response (ISR) through

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 reinitiation 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]

**Protein Families:** Druggable Genome

# **Product images:**



Coomassie blue staining of purified QRICH1 protein (Cat# TP313114). The protein was produced from HEK293T cells transfected with QRICH1 cDNA clone (Cat# [RC213114]) using MegaTran 2.0 (Cat# [TT210002]).