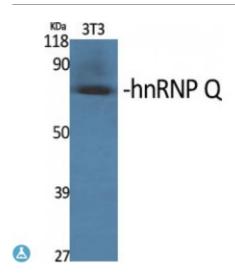


Anti-hnRNP Q antibody



Description Rabbit polyclonal to hnRNP Q.

Model STJ93571

Host Rabbit

Reactivity Human, Mouse, Rat

Applications ELISA, IF, IHC, WB

Immunogen Synthesized peptide derived from human hnRNP Q

Immunogen Region 210-290 aa, Internal

Gene ID <u>10492</u>

Gene Symbol SYNCRIP

Dilution range WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:20000

Specificity hnRNP Q Polyclonal Antibody detects endogenous levels of hnRNP Q

protein.

Tissue Specificity Ubiquitously expressed. Detected in heart, brain, pancreas, placenta, spleen,

lung, liver, skeletal muscle, kidney, thymus, prostate, uterus, small intestine,

colon, peripheral blood and testis.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Heterogeneous nuclear ribonucleoprotein Q hnRNP Q Glycine- and tyrosine-

rich RNA-binding protein GRY-RBP NS1-associated protein 1 Synaptotagmin-binding, cytoplasmic RNA-interacting protein Molecular Weight 62 kDa

Clonality Polyclonal

Unconjugated Conjugation

IgG Isotype

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide. **Formulation**

1 mg/ml Concentration

Store at -20°C, and avoid repeat freeze-thaw cycles. **Storage Instruction**

Database Links HGNC:16918OMIM:NA

Alternative Names Heterogeneous nuclear ribonucleoprotein Q hnRNP Q Glycine- and tyrosine-

> rich RNA-binding protein GRY-RBP NS1-associated protein 1 Synaptotagmin-binding, cytoplasmic RNA-interacting protein

Function Heterogenous nuclear ribonucleoprotein (hnRNP) implicated in mRNA

> processing mechanisms. Component of the CRD-mediated complex that promotes MYC mRNA stability. Isoform 1, isoform 2 and isoform 3 are associated in vitro with pre-mRNA, splicing intermediates and mature mRNA protein complexes. Isoform 1 binds to apoB mRNA AU-rich sequences. Isoform 1 is part of the APOB mRNA editosome complex and may modulate the postranscriptional C to U RNA-editing of the APOB mRNA through either by binding to A1CF (APOBEC1 complementation factor), to APOBEC1 or to RNA itself. May be involved in translationally coupled mRNA turnover.

Implicated with other RNA-binding proteins in the cytoplasmic

deadenylation/translational and decay interplay of the FOS mRNA mediated by the major coding-region determinant of instability (mCRD) domain. Interacts in vitro preferentially with poly(A) and poly(U) RNA sequences. Isoform 3 may be involved in cytoplasmic vesicle-based mRNA transport through interaction with synaptotagmins. Component of the GAIT (gamma interferon-activated inhibitor of translation) complex which mediates interferon-gamma-induced transcript-selective translation inhibition in

inflammation processes. Upon interferon-gamma activation assembles into the GAIT complex which binds to stem loop-containing GAIT elements in the 3'-UTR of diverse inflammatory mRNAs (such as ceruplasmin) and suppresses their translation; seems not to be essential for GAIT complex function.

Sequence and Domain Family The domain containing eight Arg-Gly-Gly repeats (RGG/RXR-box) may be

involved in RNA-binding and protein-protein interactions. It is methylated by

PRMT1, and essential for nuclear localization.

Cellular Localization Cytoplasm Microsome Endoplasmic reticulum Nucleus. The tyrosine

> phosphorylated form bound to RNA is found in microsomes. Localized in cytoplasmic mRNP granules containing untranslated mRNAs . Isoform 1: Nucleus, nucleoplasm. Expressed predominantly in the nucleoplasm. Isoform 2: Nucleus, nucleoplasm. Expressed predominantly in the nucleoplasm. Isoform 3: Nucleus, nucleoplasm. Expressed predominantly in the

nucleoplasm.

Phosphorylated on tyrosine. The membrane-bound form found in microsomes

is phosphorylated in vitro by insulin receptor tyrosine kinase (INSR).

Phosphorylation is inhibited upon binding to RNA, whereas the cytoplasmic

form is poorly phosphorylated.

Post-translational **Modifications**

St John's Laboratory Ltd

F +44 (0)207 681 2580 **T** +44 (0)208 223 3081

W http://www.stjohnslabs.com/
E info@stjohnslabs.com