

hnRNP Q Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP50037

Product Information

Application WB, IF Primary Accession 060506

Reactivity Human, Mouse, Rat

HostRabbitClonalitypolyclonalCalculated MW69603

Additional Information

Gene ID 10492

Other 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, SYNCRIP,

HNRPQ, NSAP1

Dilution WB~~ 1:1000 IF~~1:100

Format Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4,

150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.

Storage Conditions -20°C

Protein Information

Name SYNCRIP

Synonyms HNRPQ, NSAP1

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.

Cellular Location

Cytoplasm. Microsome {ECO:0000250 | UniProtKB:Q7TMK9} Endoplasmic reticulum. Nucleus {ECO:0000250 | UniProtKB:Q7TMK9}. Note=The tyrosine phosphorylated form bound to RNA is found in microsomes (By similarity). Localized in cytoplasmic mRNP granules containing untranslated mRNAs (By similarity). {ECO:0000250 | UniProtKB:O43390,

ECO:0000250 | UniProtKB:Q7TMK9} [Isoform 2]: Nucleus, nucleoplasm {ECO:0000250 | UniProtKB:Q7TMK9}. Note=Expressed predominantly in the nucleoplasm. {ECO:0000250 | UniProtKB:Q7TMK9}

Tissue Location

Ubiquitously expressed. Detected in heart, brain, pancreas, placenta, spleen, lung, liver, skeletal muscle, kidney, thymus, prostate, uterus, small intestine, colon, peripheral blood and testis.

Background

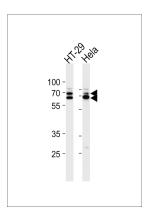
Heterogenous nuclear ribonucleoprotein (hnRNP) implicated in mRNA processing mechanisms. Component of the CRD- mediated complex that promotes MYC mRNA stability. Isoform 1, isoform 2 and isoform 3 are associated in vitro with pre-mRNA, splicing intermediates and mature mRNA protein complexes. Isoform 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.

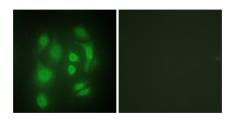
References

Harris C.E., et al.J. Virol. 73:72-80(1999). Du G., et al. Chin. Sci. Bull. 45:343-349(2000). Mourelatos Z., et al. EMBO J. 20:5443-5452(2001). Suzuki Y., et al. Submitted (APR-2005) to the EMBL/GenBank/DDBJ databases. Mungall A.J., et al. Nature 425:805-811(2003).

Images

Western blot analysis of lysates from HT-29,Hela cell line (from left to right), using hnRNP Q Antibody(C10139). C10139 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35 ug per lane.





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