

hnRNP K (pS284) Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51649

Product Information

Application WB, ICC **Primary Accession** WB, ICC

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW50976

Additional Information

Gene ID 3190

Other Names Heterogeneous nuclear ribonucleoprotein K, hnRNP K, Transformation

up-regulated nuclear protein, TUNP, HNRNPK, HNRPK

Target/Specificity KLH-conjugated synthetic peptide encompassing a sequence within the center

region of human hnRNP K. The exact sequence is proprietary.

Dilution WB~~1:1000 ICC~~N/A

Format 0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name HNRNPK

Synonyms HNRPK

Function One of the major pre-mRNA-binding proteins. Binds tenaciously to poly(C)

sequences. Likely to play a role in the nuclear metabolism of hnRNAs, particularly for pre-mRNAs that contain cytidine-rich sequences. Can also bind poly(C) single-stranded DNA. Plays an important role in p53/TP53 response to DNA damage, acting at the level of both transcription activation and repression. When sumoylated, acts as a transcriptional coactivator of p53/TP53, playing a role in p21/CDKN1A and 14-3-3 sigma/SFN induction (By similarity). As far as transcription repression is concerned, acts by interacting with long intergenic RNA p21 (lincRNA-p21), a non-coding RNA induced by p53/TP53. This interaction is necessary for the induction of apoptosis, but not cell cycle arrest. As part of a ribonucleoprotein complex composed at least of ZNF827, HNRNPL and the circular RNA circZNF827 that nucleates the complex on chromatin, may negatively regulate the transcription of genes involved in

neuronal differentiation (PubMed:33174841).

Cellular Location

Cytoplasm. Nucleus, nucleoplasm. Cell projection, podosome. Note=Recruited to p53/TP53-responsive promoters, in the presence of functional p53/TP53 (PubMed:16360036). In case of ASFV infection, there is a shift in the localization which becomes predominantly nuclear (PubMed:18775702)

Background

One of the major pre-mRNA-binding proteins. Binds tenaciously to poly(C) sequences. Likely to play a role in the nuclear metabolism of hnRNAs, particularly for pre-mRNAs that contain cytidine-rich sequences. Can also bind poly(C) single- stranded DNA. Plays an important role in p53/TP53 response to DNA damage, acting at the level of both transcription activation and repression. When sumoylated, acts as a transcriptional coactivator of p53/TP53, playing a role in p21/CDKN1A and 14-3-3 sigma/SFN induction (By similarity). As far as transcription repression is concerned, acts by interacting with long intergenic RNA p21 (lincRNA-p21), a non-coding RNA induced by p53/TP53. This interaction is necessary for the induction of apoptosis, but not cell cycle arrest.

References

Matunis M.J., et al. Mol. Cell. Biol. 12:164-171(1992). Dejgaard K., et al.J. Mol. Biol. 236:33-48(1994). Totoki Y., et al. Submitted (MAR-2005) to the EMBL/GenBank/DDBJ databases. Humphray S.J., et al. Nature 429:369-374(2004). Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.

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