

HNRPK Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP2857a

Product Information

Application	WB, E
Primary Accession	P61978
Other Accession	P61980 , O19049 , P61979 , Q4R4M6 , Q3T0D0
Reactivity	Human
Predicted	Mouse, Rat, Rabbit, Monkey, Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB17648
Calculated MW	50976
Antigen Region	1-30

Additional Information

Gene ID	3190
Other Names	Heterogeneous nuclear ribonucleoprotein K, hnRNP K, Transformation up-regulated nuclear protein, TUNP, HNRNPK, HNRPK
Target/Specificity	This HNRPK antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human HNRPK.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	HNRPK Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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)

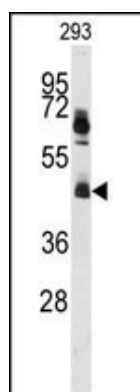
Background

HNRPK belongs to the subfamily of ubiquitously expressed heterogeneous nuclear ribonucleoproteins (hnRNPs). The hnRNPs are RNA binding proteins and they complex with heterogeneous nuclear RNA (hnRNA). These proteins are associated with pre-mRNAs in the nucleus and appear to influence pre-mRNA processing and other aspects of mRNA metabolism and transport. While all of the hnRNPs are present in the nucleus, some seem to shuttle between the nucleus and the cytoplasm. The hnRNP proteins have distinct nucleic acid binding properties. HNRPK is located in the nucleoplasm and has three repeats of KH domains that binds to RNAs. The protein is distinct among other hnRNP proteins in its binding preference; it binds tenaciously to poly(C). This protein is also thought to have a role during cell cycle progression.

References

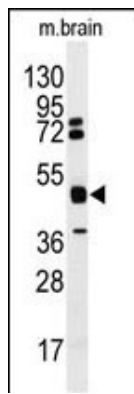
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Dejgaard K., Leffers H., Rasmussen H.H., Madsen P.J. Mol. Biol. 236:33-48(1994)
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Images



Western blot analysis of anti-HNRPK Antibody (N-term) (Cat.#AP2857a) in 293 cell line lysates (35ug/lane). HNRPK(arrow) was detected using the purified Pab.

Western blot analysis of anti-HNRPK Antibody (N-term) (Cat.#AP2857a) in mouse brain tissue lysates (35ug/lane).



HNRPK(arrow) was detected using the purified Pab.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.