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hnRNP K Rabbit mAb

Catalog # AP75563

Product Information

Application	WB, IHC-P, IHC-F, FC, IP
Primary Accession	P61978
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	50976

Additional Information

Gene ID	3190
Other Names	HNRNPK
Dilution	WB~~1:1000-1:5000 IHC-P~~N/A IHC-F~~N/A FC~~1:20 IP~~1:20
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

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. 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).

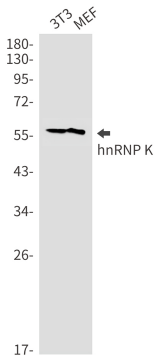
Cellular Location

Cytoplasm. Nucleus, nucleoplasm. Cell projection, podosome. Note=In case of ASFV infection, there is a shift in the localization which becomes predominantly nuclear (PubMed:18775702)

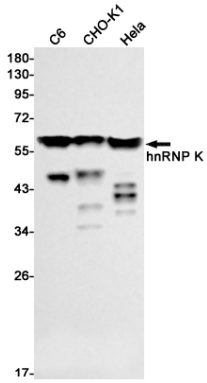
Background

Facilitate pre-mRNA processing and transport of mRNA from the nucleus to cytoplasm. hnRNP K contains three unique structural motifs termed KH domains that bind poly(C) DNA and RNA sequences. Intricate architecture enables hnRNP K to facilitate mRNA biosynthesis, transcriptional regulation, and signal transduction. Research studies have shown that cytoplasmic hnRNP K expression is increased in oral squamous cell carcinoma and pancreatic cancer, and may be a potential prognostic factor.

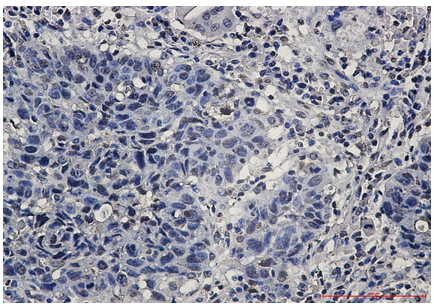
Images



Western blot analysis of hnRNP K in 3T3, MEF lysates using hnRNP K antibody.

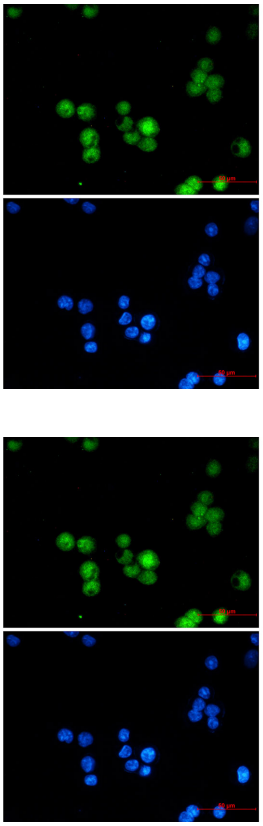


Western blot analysis of hnRNP K in C6, CHO-K1, Hela lysates using hnRNP K antibody.



Immunohistochemistry analysis of paraffin-embedded Human lung cancer using hnRNP K antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.

Immunocytochemistry analysis of hnRNP K (green) in MCF-7 using hnRNP K antibody,and DAPI(blue).



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