10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

HNRPK Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP2857a

Specification

HNRPK Antibody (N-term) Blocking Peptide - Product Information

Primary Accession P61978

HNRPK Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 3190

Other Names
Heterogeneous nuclear ribonucleoprotein K, hnRNP K, Transformation up-regulated nuclear protein, TUNP, HNRNPK, HNRPK

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP2857a was selected from the N-term region of human HNRPK. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

HNRPK Antibody (N-term) Blocking Peptide - 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)

HNRPK Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

HNRPK Antibody (N-term) Blocking Peptide - Images

HNRPK Antibody (N-term) Blocking Peptide - 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 progession.

HNRPK Antibody (N-term) Blocking Peptide - References

Hsieh T.-Y., Matsumoto M., Chou H.-C., Schneider R., Hwang S.B., Lee A.S., Lai M.M.C.J. Biol. Chem. 273:17651-17659(1998) Kwiek N.C., Thacker D.F., Datto M.B., Megosh H.B.,Cell. Signal. 18:1769-1778(2006) Dejgaard K., Leffers H., Rasmussen H.H., Madsen P.,J. Mol. Biol. 236:33-48(1994)Hernaez B., Escribano J.M., Alonso C.FEBS Lett. 582:3275-3280(2008)