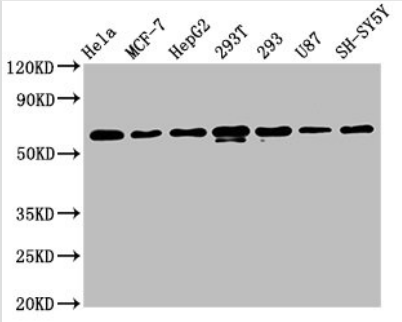
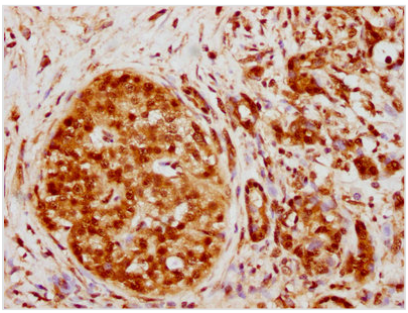
HNRNPK Recombinant Monoclonal Antibody

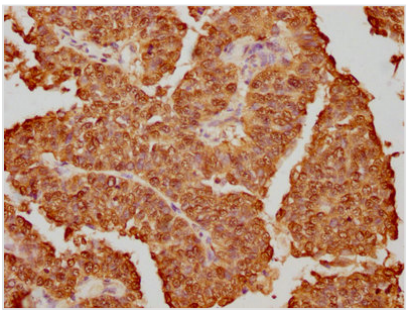
Product Code	CSB-RA010611A0HU
Abbreviation	Heterogeneous nuclear ribonucleoprotein K
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P61978
Immunogen	A synthesized peptide derived from human HNRNPK
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC, IF, IP; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200, IF:1:20-1:200, IP:1:200-1:1000
Relevance	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.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Alias	Heterogeneous nuclear ribonucleoprotein K, hnRNP K, Transformation up-regulated nuclear protein, TUNP, HNRNPK, HNRPK
Immunogen Species	Homo sapiens (Human)
Research Area	Epigenetics and Nuclear Signaling
Gene Names	HNRNPK
Clone No.	3G7
Image	



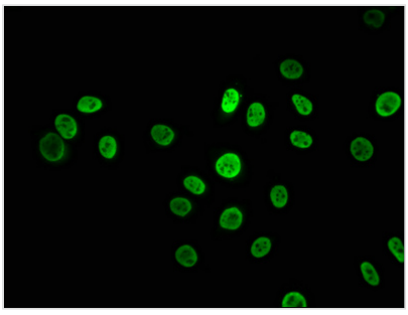
Western Blot
Positive WB detected in: Hela whole cell lysate, MCF-7 whole cell lysate, HepG2 whole cell lysate, 293T whole cell lysate, 293 whole cell lysate, U87 whole cell lysate, SH-SY5Y whole cell lysate
All lanes: HNRNPK antibody at 1.3µg/ml
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 51, 52, 49 KDa
Observed band size: 60 KDa



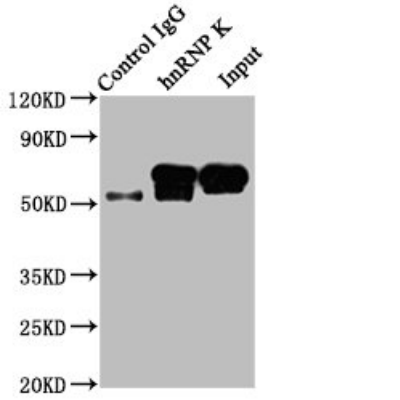
IHC image of CSB-RA010611A0HU diluted at 1:130.5 and staining in paraffin-embedded human pancreatic cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



IHC image of CSB-RA010611A0HU diluted at 1:130.5 and staining in paraffin-embedded human cervical cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



Immunofluorescence staining of A549 cells with CSB-RA010611A0HU at 1:43.5, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4?. The secondary antibody was Alexa Fluor 488-congugated AffiniPure Goat Anti-Rabbit IgG (H+L).



Immunoprecipitating HNRNPK in HepG2 whole cell lysate
Lane 1: Rabbit control IgG instead of CSB-RA010611A0HU in HepG2 whole cell lysate. For western blotting, a HRP-conjugated Protein G antibody was used as the secondary antibody (1/2000)
Lane 2: CSB-RA010611A0HU (3μg) + HepG2 whole cell lysate (500μg)
Lane 3: HepG2 whole cell lysate (20μg)

Description

The recombinant HNRNPK antibody production commenced with the obtaining of genes encoding antibody against HNRNPK. Antibody genes were obtained by sequencing and screening DNA reversely transcribed from RNA that was extracted from the B cells isolated from immunized animals. These genes were cloned into plasma vectors and subsequently transfected into a mammalian cell line for production. The product is the recombinant HNRNPK antibody. It underwent purification using affinity-chromatography from the cell culture medium. This recombinant HNRNPK antibody has been validated to detect the HNRNPK protein from Human in the ELISA, WB, IHC, IF, IP.

HNRNPK is a DNA/RNA-binding protein involved in multiple biological processes including the regulation of gene transcription, pre-mRNA splicing, mRNA nuclear export, mRNA translation, RNA stability, chromatin remodeling, and decay. Dysregulation of HNRNPK is related to carcinogenesis, cancer development, progression, and prognosis. In some malignancies, HNRNPK is linked to dismal prognosis. In addition to oncogenic functions, HNRNPK, ad a transcriptional co-activator of p53, may act as a tumor suppressor and loss of HNRNPK was prone to cause tumorigenesis.