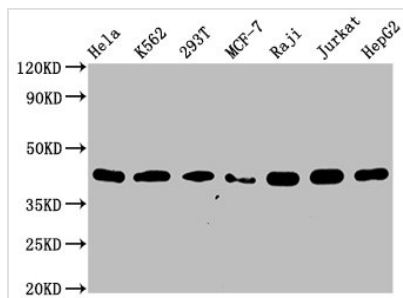




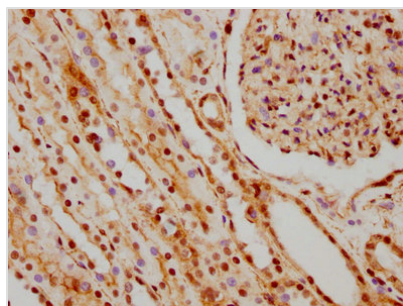
# HNRNPC Recombinant Monoclonal Antibody

<b>Product Code</b>	CSB-RA010605A0HU
<b>Abbreviation</b>	Heterogeneous nuclear ribonucleoproteins C1/C2
<b>Storage</b>	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
<b>Uniprot No.</b>	P07910
<b>Immunogen</b>	A synthesized peptide derived from human HNRNPC
<b>Species Reactivity</b>	Human
<b>Tested Applications</b>	ELISA, WB, IHC, IF, FC, IP; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200, IF:1:20-1:200, IP:1:200-1:1000
<b>Relevance</b>	Binds pre-mRNA and nucleates the assembly of 40S hnRNP particles (PubMed:8264621). Interacts with poly-U tracts in the 3'-UTR or 5'-UTR of mRNA and modulates the stability and the level of translation of bound mRNA molecules (PubMed:12509468, PubMed:16010978, PubMed:7567451, PubMed:8264621). Single HNRNPC tetramers bind 230-240 nucleotides. Trimers of HNRNPC tetramers bind 700 nucleotides (PubMed:8264621). May play a role in the early steps of spliceosome assembly and pre-mRNA splicing. N6-methyladenosine (m6A) has been shown to alter the local structure in mRNAs and long non-coding RNAs (lncRNAs) via a mechanism named 'm(6)A-switch', facilitating binding of HNRNPC, leading to regulation of mRNA splicing (PubMed:25719671).
<b>Form</b>	Liquid
<b>Conjugate</b>	Non-conjugated
<b>Storage Buffer</b>	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
<b>Purification Method</b>	Affinity-chromatography
<b>Isotype</b>	Rabbit IgG
<b>Clonality</b>	Monoclonal
<b>Alias</b>	Heterogeneous nuclear ribonucleoproteins C1/C2, hnRNP C1/C2, HNRNPC, HNRPC
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Research Area</b>	Epigenetics and Nuclear Signaling
<b>Gene Names</b>	HNRNPC
<b>Clone No.</b>	9G1
<b>Image</b>	

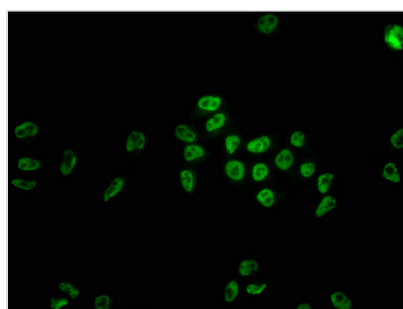


**Western Blot**

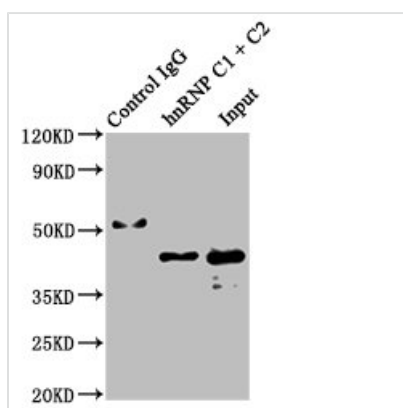
Positive WB detected in: HeLa whole cell lysate, K562 whole cell lysate, 293T whole cell lysate, MCF-7 whole cell lysate, Raji whole cell lysate, Jurkat whole cell lysate, HepG2 whole cell lysate  
 All lanes: hnRNP C1 + C2 antibody at 0.66µg/ml  
 Secondary  
 Goat polyclonal to rabbit IgG at 1/50000 dilution  
 Predicted band size: 34, 33, 26, 28 KDa  
 Observed band size: 42 KDa



IHC image of CSB-RA010605A0HU diluted at 1:66.35 and staining in paraffin-embedded human kidney tissue performed on a Leica Bond™ 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.

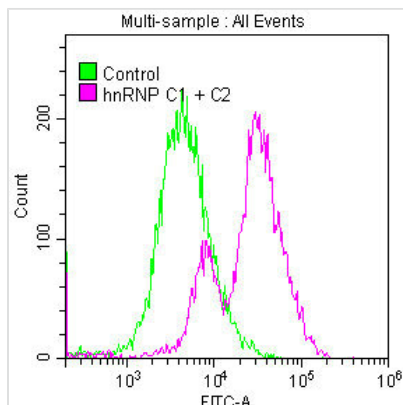


Immunofluorescence staining of HeLa cells with CSB-RA010605A0HU at 1:22, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4?. The secondary antibody was Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).



**Immunoprecipitating hnRNP C1 + C2 in HeLa whole cell lysate**

Lane 1: Rabbit control IgG instead of CSB-RA010605A0HU in HeLa whole cell lysate. For western blotting, a HRP-conjugated Protein G antibody was used as the secondary antibody (1/2000)  
 Lane 2: CSB-RA010605A0HU (3µg) + HeLa whole cell lysate (500µg)  
 Lane 3: HeLa whole cell lysate (20µg)



Overlay histogram showing MCF-7 cells stained with CSB-RA010605A0HU (red line) at 1:50. The cells were fixed with 70% Ethylalcohol (18h) and then permeabilized with 0.3% Triton X-100 for 2 min. The cells were then incubated in 1x PBS /10% normal goat serum to block non-specific protein-protein interactions followed by primary antibody for 1 h at 4?. The secondary antibody used was FITC goat anti-rabbit IgG (H+L) at 1/200 dilution for 1 h at 4?. Control antibody (green line) was used under the same conditions. Acquisition of >10,000 events was performed.

## Description

CUSABIO administered a human HNRNPC-derived peptide to an animal to elicit an immune response. B cells were subsequently isolated from the immunized animal and fused with myeloma cells, generating hybridoma cells. Through screening, a single hybridoma cell clone that produces the desired HNRNPC-specific antibody was identified and selected. RNA was extracted from the chosen hybridoma cells, and the variable regions of the HNRNPC antibody's heavy and light chains were isolated and amplified using reverse transcription PCR. These amplified HNRNPC antibody variable regions were then cloned into an expression vector and transfected into a host cell line for expression purposes. The resulting HNRNPC recombinant monoclonal antibodies were purified from the cell culture supernatant using affinity chromatography. Six applications including ELISA, WB, IHC, IF, FC, and IP were employed to confirm the binding specificity and affinity of this antibody. Notably, this antibody exhibits recognition specifically for human HNRNPC protein.