

hnRNP K (H-300): sc-25373

BACKGROUND

Heterogeneous nuclear ribonucleoproteins (hnRNPs) constitute a set of polypeptides that contribute to mRNA transcription, pre-mRNA processing as well as mature mRNA transport to the cytoplasm and translation. They also bind heterogeneous nuclear RNA (hnRNA), which are the transcripts produced by RNA polymerase II. There are approximately 20 known hnRNP proteins and their complexes are the major constituents of the spliceosome. The majority of hnRNP proteins components are localized to the nucleus; however some shuttle between the nucleus and the cytoplasm, such as hnRNP K. hnRNP K recruits a variety of molecular partners through two K homologous (KH) domains, which are required for protein-protein interactions. hnRNP K also contains several potential phosphorylation sites, including Ser 302, the major site of PKC δ phosphorylation, which are thought to regulate various cellular functions, including sequence-specific DNA binding, transcription, RNA binding and nucleocytoplasmic shuttling.

CHROMOSOMAL LOCATION

Genetic locus: HNRNPK (human) mapping to 9q21.32; Hnrnpk (mouse) mapping to 13 B1.

SOURCE

hnRNP K (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 of hnRNP K of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as agarose conjugate for immunoprecipitation, sc-25373 AC, 500 μ g/0.25 ml agarose in 1 ml.

APPLICATIONS

hnRNP K (H-300) is recommended for detection of hnRNP K of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

hnRNP K (H-300) is also recommended for detection of hnRNP K in additional species, including canine.

Suitable for use as control antibody for hnRNP K siRNA (h): sc-38282, hnRNP K siRNA (m): sc-38283, hnRNP K shRNA Plasmid (h): sc-38282-SH, hnRNP K shRNA Plasmid (m): sc-38283-SH, hnRNP K shRNA (h) Lentiviral Particles: sc-38282-V and hnRNP K shRNA (m) Lentiviral Particles: sc-38283-V.

Molecular Weight of hnRNP K: 65 kDa.

Positive Controls: Sol8 nuclear extract: sc-2157, HeLa nuclear extract: sc-2120 or KNRK nuclear extract: sc-2141.

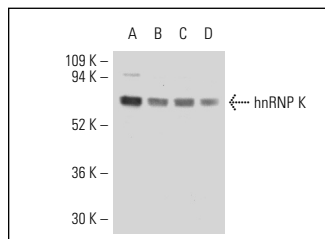
RESEARCH USE

For research use only, not for use in diagnostic procedures.

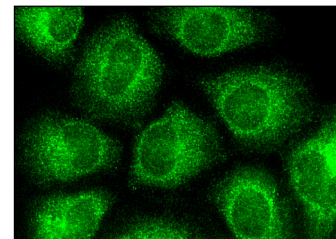
STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



hnRNP K (H-300): sc-25373. Western blot analysis of hnRNP K expression in HeLa (A), KNRK (B), Sol8 (C) and NIH/3T3 (D) nuclear extracts.



hnRNP K (H-300): sc-25373. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

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4. Burnham, A.J., et al. 2007. Heterogeneous nuclear ribonuclear protein K interacts with Sindbis virus nonstructural proteins and viral subgenomic mRNA. *Virology* 367: 212-221.
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6. Motallebipour, M., et al. 2009. Two polypyrimidine tracts in the nitric oxide synthase 2 gene: similar regulatory sequences with different properties. *Mol. Biol. Rep.* 37: 2021-2030.
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10. Barboro, P., et al. 2011. Androgen receptor and heterogeneous nuclear ribonucleoprotein K colocalize in the nucleoplasm and are modulated by bicalutamide and 4-hydroxy-tamoxifen in prostatic cancer cell lines. *Prostate* 71: 1466-1479.