

# U11/U12 snRNP 65K (H-5): sc-514951

## BACKGROUND

U11/U12 snRNP 65K, also known as RBM40 (RNA-binding protein 40), RNPC3 (RNA-binding region-containing protein 3) or RNP, is a 517 amino acid nuclear protein that plays a role in pre-mRNA U12-dependent splicing by the minor spliceosome, ultimately leading to the removal of U12-type introns. Expressed at highest levels in kidney and pancreas, U11/U12 snRNP 65K is also weakly detected in placenta, heart, brain, lung, liver, thymus, colon, ovary, testis, prostate, spleen and small intestine. The gene encoding U11/U12 snRNP 65K maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome.

## REFERENCES

1. Eudy, J.D., et al. 1998. Mutation of a gene encoding a protein with extracellular matrix motifs in Usher syndrome type IIa. *Science* 280: 1753-1757.
2. Tayebi, N., et al. 2001. Gaucher disease and parkinsonism: a phenotypic and genotypic characterization. *Mol. Genet. Metab.* 73: 313-321.
3. Zhao, E., et al. 2003. Cloning and identification of a novel human RNPC3 gene that encodes a protein with two RRM domains and is expressed in the cell nucleus. *Biochem. Genet.* 41: 315-323.
4. Plasilova, M., et al. 2004. Exclusion of an extracolonic disease modifier locus on chromosome 1p33-36 in a large Swiss familial adenomatous polyposis kindred. *Eur. J. Hum. Genet.* 12: 365-371.

## CHROMOSOMAL LOCATION

Genetic locus: RNPC3 (human) mapping to 1p21.1; Rnpc3 (mouse) mapping to 3 F3.

## SOURCE

U11/U12 snRNP 65K (H-5) is a mouse monoclonal antibody raised against amino acids 20-108 mapping near the N-terminus of U11/U12 snRNP 65K of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>2b</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

U11/U12 snRNP 65K (H-5) is available conjugated to agarose (sc-514951 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514951 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514951 PE), fluorescein (sc-514951 FITC), Alexa Fluor® 488 (sc-514951 AF488), Alexa Fluor® 546 (sc-514951 AF546), Alexa Fluor® 594 (sc-514951 AF594) or Alexa Fluor® 647 (sc-514951 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514951 AF680) or Alexa Fluor® 790 (sc-514951 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

U11/U12 snRNP 65K (H-5) is recommended for detection of U11/U12 snRNP 65K of human origin and RNPC3 of mouse and rat origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

Suitable for use as control antibody for U11/U12 snRNP 65K siRNA (h): sc-88143, RNPC3 siRNA (m): sc-153057, U11/U12 snRNP 65K shRNA Plasmid (h): sc-88143-SH, RNPC3 shRNA Plasmid (m): sc-153057-SH, U11/U12 snRNP 65K shRNA (h) Lentiviral Particles: sc-88143-V and RNPC3 shRNA (m) Lentiviral Particles: sc-153057-V.

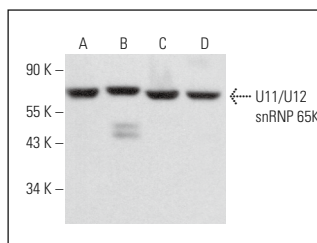
Molecular Weight of U11/U12 snRNP 65K: 59 kDa.

Positive Controls: MIA PaCa-2 cell lysate: sc-2285, Caki-1 cell lysate: sc-2224 or PANC-1 whole cell lysate: sc-364380.

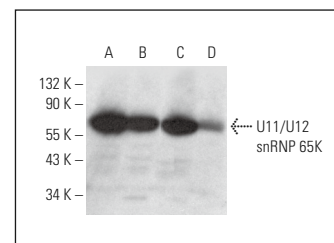
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



U11/U12 snRNP 65K (H-5): sc-514951. Western blot analysis of U11/U12 snRNP 65K expression in HeLa (A), PC-3 (B) and 3T3-L1 (C) whole cell lysates and rat testis tissue extract (D).



U11/U12 snRNP 65K (H-5): sc-514951. Western blot analysis of U11/U12 snRNP 65K expression in MIA PaCa-2 (A), Caki-1 (B) and PANC-1 (C) whole cell lysates and human heart tissue extract (D).

## STORAGE

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

## RESEARCH USE

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