

Snurportin-1 (C-1): sc-390155

BACKGROUND

Snurportin-1, also known as SNUPN, KPBL or RNUT1 (RNA U transporter 1), is a nuclear import adaptor protein belonging to the Snurportin family. Localizing to the cytoplasm and nucleus, Snurportin-1 contains an N-terminal IBB domain and a trimethylguanosine (m3G)-cap binding domain. It specifically binds the terminal 2,2,7-m3G-cap at the 5' end of U snRNPs and functions to transport U snRNPs into the nucleus via an association with Importin β . The nuclear import of U snRNPs is an important step in the maturation of the spliceosome. The complex formed between Snurportin-1, U snRNP and Importin β is essential for nuclear import. Depending on the U snRNP (U1 or U2), Snurportin-1 may localize to Cajal bodies after nuclear import. In the nucleus, CRM1 binds to Snurportin-1 and is responsible for the recycling of Snurportin-1 back to the cytoplasm for additional rounds of U snRNP import.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SNUPN (human) mapping to 15q24.2; Snupn (mouse) mapping to 9 B.

SOURCE

Snurportin-1 (C-1) is a mouse monoclonal antibody raised against amino acids 1-300 mapping at the N-terminus of Snurportin-1 of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Snurportin-1 (C-1) is recommended for detection of Snurportin-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for Snurportin-1 siRNA (h): sc-63048, Snurportin-1 siRNA (m): sc-63049, Snurportin-1 shRNA Plasmid (h): sc-63048-SH, Snurportin-1 shRNA Plasmid (m): sc-63049-SH, Snurportin-1 shRNA (h) Lentiviral Particles: sc-63048-V and Snurportin-1 shRNA (m) Lentiviral Particles: sc-63049-V.

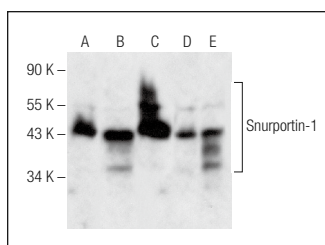
Molecular Weight of Snurportin-1: 46 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, IMR-32 cell lysate: sc-2409 or Jurkat whole cell lysate: sc-2204.

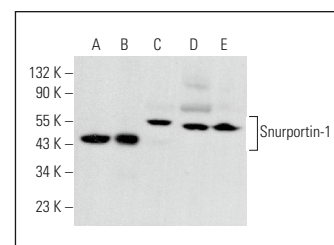
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ 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



Snurportin-1 (C-1): sc-390155. Western blot analysis of Snurportin-1 expression in IMR-32 (A), HeLa (B) and Jurkat (C) whole cell lysates and IMR-32 (D) and HeLa (E) nuclear extracts.



Snurportin-1 (C-1): sc-390155. Western blot analysis of Snurportin-1 expression in HeLa (A) and MOLT-4 (B) whole cell lysates and human brain (C), mouse brain (D) and rat brain (E) tissue extracts.

STORAGE

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