pICIn (Q-20): sc-22128



The Power to Question

BACKGROUND

The formation of the spliceosome includes the assembly of Sm proteins in an ordered manner onto snRNAs. This process is mediated by the survival of motor neuron (SMN) protein, and is enhanced by modification of specific arginine residues in the Sm proteins to symmetrical dimethylarginines (sDMAs). sDMA modification of Sm proteins is catalyzed by the methylosome, a complex comprised of the type II methyltransferase PRMT5 (also designated JAK-binding protein 1, JBP1), plCln, and two novel factors. PRMT5 binds the Sm proteins via their arginine- and glycine-rich (RG) domains, while plCln binds the Sm domains. plCln also acts as an inhibitor of SnRNP assembly by preventing specific interactions between Sm proteins required for the formation of the Sm core. plCln is a highly conserved, ubiquitously expressed protein that localizes primarily to the cytoplasm, and may play a role as a swelling-activated anion channel or a channel regulator in addition to its function in the methylosome. The gene encoding human plCln maps to chromosome 11q14.1.

CHROMOSOMAL LOCATION

Genetic locus: CLNS1A (human) mapping to 11q14.1; Clns1a (mouse) mapping to 7 E2.

SOURCE

plCln (Q-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of plCln of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-22128 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

plCln (0-20) is recommended for detection of plCln 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).

plCln (0-20) is also recommended for detection of plCln in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for plCln siRNA (h): sc-42594, plCln siRNA (m): sc-42595, plCln shRNA Plasmid (h): sc-42594-SH, plCln shRNA Plasmid (m): sc-42595-SH, plCln shRNA (h) Lentiviral Particles: sc-42594-V and plCln shRNA (m) Lentiviral Particles: sc-42595-V.

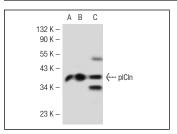
Molecular Weight of plCln: 39 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or plCln (m): 293T Lysate: sc-127333.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



plCIn (Q-20): sc-22128. Western blot analysis of plCIn expression in non-transfected 293T: sc-117752 (A), mouse plCIn transfected 293T: sc-127333 (B) and Hep G2 (C) whole cell Ivsates.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **pICIn (G-1):** sc-271327 or **pICIn (C-5):** sc-393525, our highly recommended monoclonal alternatives to pICIn (Q-20).

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