10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-CLNS1A Antibody

Catalog # AP59518

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P54105
Reactivity	Human, Mouse, Rat, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	26215

Additional Information

Gene ID	1207
Other Names	CLCI; ICLN; Methylosome subunit pICln; Chloride channel, nucleotide sensitive 1A; Chloride conductance regulatory protein ICln; I(Cln); Chloride ion current inducer protein; ClCI; Reticulocyte pICln
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human CLNS1A. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IP (1/10 - 1/100) IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

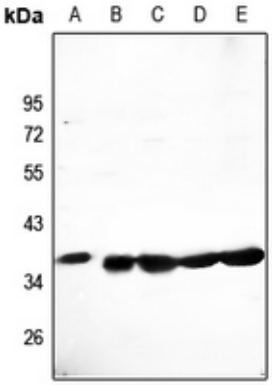
Name	CLNS1A
Synonyms	CLCI, ICLN
Function	Involved in both the assembly of spliceosomal snRNPs and the methylation of Sm proteins (PubMed:10330151, PubMed:11713266, PubMed:18984161, PubMed:21081503). Chaperone that regulates the assembly of spliceosomal U1, U2, U4 and U5 small nuclear ribonucleoproteins (snRNPs), the building blocks of the spliceosome, and thereby plays an important role in the splicing of cellular pre- mRNAs (PubMed:10330151, PubMed:18984161). Most spliceosomal snRNPs contain a common set of Sm proteins SNRPB, SNRPD1, SNRPD2, SNRPD3, SNRPE, SNRPF and SNRPG that assemble in a heptameric protein ring on the Sm site of the small nuclear RNA to form the core snRNP (Sm core) (PubMed:10330151). In the cytosol, the Sm proteins SNRPD1, SNRPD2, SNRPE, SNRPF and SNRPG are trapped in an inactive 6S pICln-Sm complex by the chaperone CLNS1A that controls the assembly of the core

snRNP (PubMed:10330151, PubMed:18984161). Dissociation by the SMN complex of CLNS1A from the trapped Sm proteins and their transfer to an SMN-Sm complex triggers the assembly of core snRNPs and their transport to the nucleus (PubMed:10330151, PubMed:18984161).

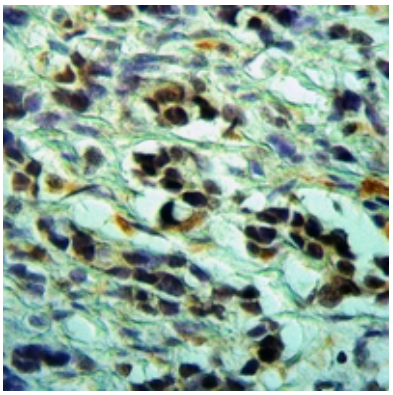
Cellular Location

Cytoplasm, cytosol. Nucleus. Cytoplasm, cytoskeleton. Note=A small fraction is also associated with the cytoskeleton (PubMed:18984161)

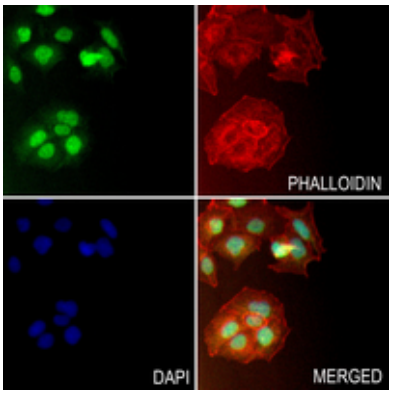
Images



Western blot analysis of CLNS1A expression in H9C2 (A), AML12 (B), Jurkat (C), HepG2 (D), A549 (E) whole cell lysates. (Predicted band size: 26 kD; Observed band size: 39 kD)



Immunohistochemical analysis of CLNS1A staining in human stomach cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of CLNS1A staining in H460 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.