

### **CLNS1A Antibody (C-term) Blocking Peptide** Synthetic peptide

Catalog # BP6520b

# Specification

# CLNS1A Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

<u>P54105</u>

# CLNS1A Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 1207

#### **Other Names**

Methylosome subunit pICln, Chloride channel, nucleotide sensitive 1A, Chloride conductance regulatory protein ICln, I(Cln), Chloride ion current inducer protein, CICI, Reticulocyte pICln, CLNS1A, CLCI, ICLN

### Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/products/AP6520b>AP6520b</a> was selected from the C-term region of human CLNS1A. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# CLNS1A Antibody (C-term) Blocking Peptide - Protein Information

### Name CLNS1A

### Synonyms CLCI, ICLN

#### Function

Involved in both the assembly of spliceosomal snRNPs and the methylation of Sm proteins (PubMed:<a href="http://www.uniprot.org/citations/21081503" target="\_blank">21081503</a>, PubMed:<a href="http://www.uniprot.org/citations/18984161" target="\_blank">18984161</a>, PubMed:<a href="http://www.uniprot.org/citations/10330151" target="\_blank">18984161</a>, PubMed:<a href="http://www.uniprot.org/citations/10330151" target="\_blank">10330151</a>, PubMed:<a href="http://www.uniprot.org/citations/10330151" target="\_blank">10330151</a>, PubMed:<a href="http://www.uniprot.org/citations/11713266" target="\_blank">11713266</a>). 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:<a



href="http://www.uniprot.org/citations/18984161" target="\_blank">18984161</a>, PubMed:<a href="http://www.uniprot.org/citations/10330151" target="\_blank">10330151</a>). 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:<a

href="http://www.uniprot.org/citations/10330151" target="\_blank">10330151</a>). In the cytosol, the Sm proteins SNRPD1, SNRPD2, SNRPE, SNRPF and SNRPG are trapped in an inactive 6S pICIn-Sm complex by the chaperone CLNS1A that controls the assembly of the core snRNP (PubMed:<a href="http://www.uniprot.org/citations/10330151" target="\_blank">10330151</a>, PubMed:<a href="http://www.uniprot.org/citations/10330151" target="\_blank">10330151</a>, PubMed:<a href="http://www.uniprot.org/citations/10330151" target="\_blank">18984161</a>). 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:<a href="http://www.uniprot.org/citations/10330151" target="\_blank">10330151</a>, PubMed:<a href="http://www.uniprot.org/citations/10330151" target="\_blank">18984161</a>).

**Cellular Location** 

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

## CLNS1A Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

<u>Blocking Peptides</u>

## CLNS1A Antibody (C-term) Blocking Peptide - Images

## CLNS1A Antibody (C-term) Blocking Peptide - Background

CLNS1A is a protein that functions in multiple regulatory pathways. The protein complexes with numerous cytosolic proteins and performs diverse functions including regulation of small nuclear ribonucleoprotein biosynthesis, platelet activation and cytoskeletal organization. The protein is also found associated with the plasma membrane where it functions as a chloride current regulator.

### CLNS1A Antibody (C-term) Blocking Peptide - References

Yeung, C.H., Biol. Reprod. 73 (5), 1057-1063 (2005)