

Datasheet for ABIN933127 **anti-CLNS1A antibody**



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Overview

Quantity:	50 µg
Target:	CLNS1A
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CLNS1A antibody is un-conjugated
Application:	Western Blotting (WB), Immunocytochemistry (ICC), Dot Blot (DB)

Product Details

Immunogen:	CLNS1 A antibody was raised in mouse using recombinant Human Chloride Channel, Nucleotide-Sensitive, 1 (Clns1)
Clone:	2187C2a
Isotype:	IgG1
Cross-Reactivity:	Human, Mouse (Murine), Rat (Rattus)
Cross-Reactivity (Details):	Other species not studied.
Purification:	Protein G affinity chromatography

Target Details

Target:	CLNS1A
Alternative Name:	CLNS1A (CLNS1A Products)

Target Details

Background: The interaction with Sm proteins inhibits their assembly on U RNA and interferes with snRNP biogenesis. Inhibits the binding of survival motor neuron protein (SMN) to Sm proteins. May participate in cellular volume control by activation of a swelling-induced chloride conductance pathway. Synonyms: Monoclonal CLNS1A antibody, Anti-CLNS1A antibody, Chloride channel nucleotide sensitive 1A antibody, CLCI antibody, ICIn antibody, CLNS1B antibody.

Pathways: [Ribonucleoprotein Complex Subunit Organization](#)

Application Details

Application Notes: WB: 0.2-2 µg/mL, ICC: 2-100 µg/mL
Optimal conditions should be determined by the investigator.

Restrictions: For Research Use only

Handling

Concentration: Lot specific

Buffer: CLNS1 A antibody in PBS (3.0 mM KCl, 1.5 mM KH₂ PO₄, 140 mM NaCl, 8.0 mM Na₂ HPO₄ (pH 7.4)) containing 1 % bovine serum albumin (BSA) and 0.05 % sodium azide (NaN₃).

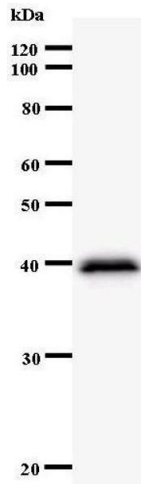
Preservative: Sodium azide

Precaution of Use: This product contains Sodium Azide: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.

Handling Advice: Avoid repeated freeze/thaw cycles.
Dilute only prior to immediate use.

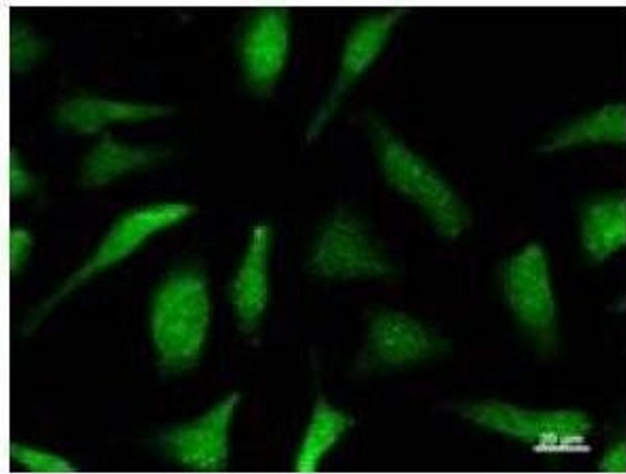
Storage: 4 °C/-20 °C

Storage Comment: Store at 2-8 °C for up to one year. We recommend long term storage at -20 °C.



Western Blotting

Image 1.



Immunofluorescence

Image 2. Immunostaining analysis in HeLa cells. HeLa cells were fixed with 4% paraformaldehyde and permeabilized with 0.01% Triton-X100 in PBS. The cells were immunostained with anti-CLNS1A antibody.



Successfully validated (Western Blotting (WB))

by [AG Gruss](#), Institut für Genetik, Rheinische Friedrich-Wilhelms-Universität Bonn

Report Number: 102907

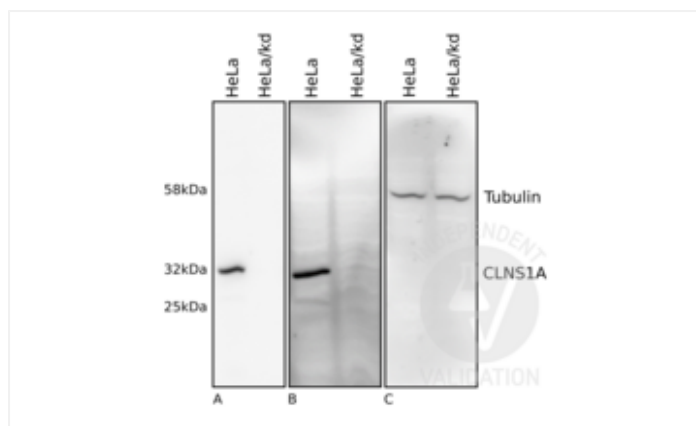
Date: Sep 20 2018

Target:	CLNS1A
Lot Number:	9832
Method validated:	Western Blotting (WB)
Positive Control:	HeLa cells Independent antibody
Negative Control:	HeLa cells, CLNS1A knockdown using Dharmacon smartpool siRNA
Notes:	Passed. ABIN933127 specifically reveals endogenous CLNS1A in HeLa cell lysates while no signal is detected subsequently to knock-down of the antigen.
Primary Antibody:	ABIN933127
Secondary Antibody:	goat anti-mouse IgG (H+L) (Jackson ImmunoResearch, 115-005-003, lot 128525)
Protocol:	<ul style="list-style-type: none">• Seed 3×10^4 HeLa cells in DMEM (PAN Biotech, P04-41450, 2730618) supplemented with 10% FBS (PAN Biotech, P03-3302), without antibiotics, in 6 well plates in 2 ml media.• Grow for 24h cells at 37°C and 5% CO₂ to 70% confluency.• Change medium.• Transfect cells with 60pmol ON-TARGETplus SmartPool siRNA human (Dharmacon, L-012571-00-0005, lot 170831) in 125µl 150mM NaCl added to 7.5µl Lipofectamine RNAiMax (13778030, lot 1911816) in 125µl 150mM NaCl.• Grow cells for 24h at 37°C and 5% CO₂.• Change medium.• Grow cells for 72h at 37°C and 5% CO₂.• Wash cells once with PBS (PAN Biotech, P04-36500, lot 3620618).• Detach cells with 100µl trypsin per well.• For WB the cells were once washed with PBS (PAN Biotech) before treated with 100µl of Trypsin (PAN Biotech, P10-023100, lot 6860417) per well.• Once cells are detached add 900µl medium.• Count cells.• Add 40µl 1x Laemmli buffer (Roth, K929.1, lot 227259243) to 2×10^5 cells. Heat up to 99°C for 10min.• Separate 10µl of the lysates on a freshly cast denaturing 12% SDS-PAGE gel in an electrophoresis chamber for 1h at 120V.

- Transfer proteins onto PVDF membrane (Merck, IPVH0010, lot K5KN7128I) with a wet blotting system for 1h at 80V.
- Block the membrane with 1x Roti Block (Roth, A151.2, lot 148270222) for 30min at RT.
- Incubation with primary
 - mouse anti-CLNS1A antibody (antibodies-online, ABIN933127, lot 9832) diluted 1:500 in 1x Roti Block for 1h at RT,
 - mouse anti-CLNS1A antibody (Santa Cruz, sc-271454, G3010) diluted 1:3000 in 1x Roti Block for 1h at RT, or
 - rat anti tubulin antibody (YOL 1/34 gifted) diluted 1:1000 in 1x Roti Block for 1h at RT.
- Wash membrane 2x for 10min with 1x TBST.
- Incubation with secondary
 - goat anti-mouse IgG (H+L) (Jackson ImmunoResearch, 115-005-003, lot 128525) diluted 1:10000 in PBS for 45min at RT or
 - goat anti-rat IgG (H+L) (Jackson ImmunoResearch, 112-035-003) diluted 1:10000 in PBS for 45min at RT.
- Wash membrane 5x for 5min with 1x TBS-T.
- Reveal protein bands using ECL (GE Healthcare, RPN3244V2, 9633722) on an LAS mini system (GE healthcare).

Experimental Notes: Western blot using ABIN933127 on HeLa cell extracts reveals a band of the expected molecular weight. The same band is also detected by an independent CLNS1A antibody and disappears upon siRNA knock-down.

Image for Validation report #102907



Validation image no. 1 for anti-Chloride Channel, Nucleotide-Sensitive, 1A (CLNS1A) antibody (ABIN933127)

Western blot analysis of HeLa cell lysates without (HeLa) or with siRNA knock-down (HeLa/kd). CLNS1A was specifically detected using ABIN933127 (A) and an independent antibody (B). Tubulin serves as loading control (C).



Successfully validated (Immunofluorescence (IF))

by [AG Gruss](#), Institut für Genetik, Rheinische Friedrich-Wilhelms-Universität Bonn

Report Number: 103452

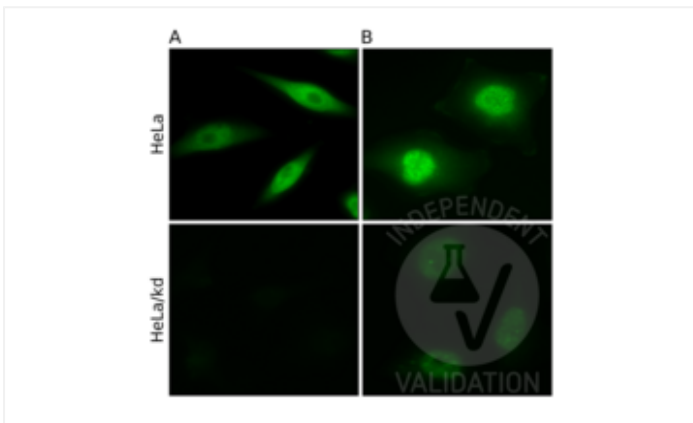
Date: Sep 20 2018

Target:	CLNS1A
Lot Number:	9832
Method validated:	Immunofluorescence (IF)
Positive Control:	HeLa cells Independent antibody
Negative Control:	HeLa cells, CLNS1A knockdown using Dharmacon smartpool siRNA
Notes:	Passed. ABIN933127 specifically reveals endogenous CLNS1A in HeLa cells while no signal is detected subsequently to knock-down of the antigen.
Primary Antibody:	ABIN933127
Secondary Antibody:	AF488 conjugated secondary goat anti-mouse IgG (H+L) (ThermoFisher Scientific, A32723)
Protocol:	<ul style="list-style-type: none">• Seed 3×10^4 HeLa cells in DMEM (PAN Biotech, P04-41450, 2730618) supplemented with 10% FBS (PAN Biotech, P03-3302), without antibiotics, in 6 well plates in 2ml media.• Grow cells for 24h at 37°C and 5% CO₂ to 70% confluency.• Change medium.• Transfect cells with 60pmol ON-TARGETplus SmartPool siRNA human (Dharmacon, L-012571-00-0005, lot 170831) in 125µl 150mM NaCl added to 7.5µl Lipofectamine RNAiMax (13778030, lot 1911816) in 125µl 150mM NaCl.• Grow cells for 24h at 37°C and 5% CO₂.• Change medium.• Grow cells for 72h at 37°C and 5% CO₂.• Transfer cells from each well on five coverslips.• Grow cells for 96h at 37°C and 5% CO₂.• Wash cells with 1x PBS (PAN Biotech).• Add 4% PFA for 10min at 37°C.• Wash cells 2x with 1x PBS 1x.• Wash cells 1x 5min with 0.5% Triton X-100.• Wash cells 2x with 1x PBS containing 1x Roti-Immunoblock (Roth, T144.1, lot 248272501).• Store cells ON at 4°C.• Incubation with primary<ul style="list-style-type: none">◦ mouse anti-CLNS1A antibody (antibodies-online, ABIN933127, lot 9832) diluted 1:500 in

- Roti-Immunoblock for 1h at RT or
 - mouse anti-CLNS1A antibody (Santa Cruz, sc-271454, G3010) diluted 1:500 in Roti-Immunoblock for 1h at RT.
- Wash coverslips with PBS.
- Incubation with AF488 conjugated secondary goat anti-mouse IgG (H+L) (ThermoFisher Scientific, A32723) diluted 1:1000 for 45min at RT.
- Wash coverslips with PBS.
- Mount coverslips on glass slides in Fluoromount-G mounting medium (Southern Biotech, 0100-01).
- Image acquisition with an exposure time of 600ms (ABIN933127) or 400ms (sc-271454) on (Zeiss Axiophot, 63x magnification, resolution 1388x1040 pixels).

Experimental Notes: IF staining of HeLa cells using ABIN933127 reveals the expected staining pattern. Cellular staining was not observed after CLNS1A knock-down.

Image for Validation report #103452



Validation image no. 1 for anti-Chloride Channel, Nucleotide-Sensitive, 1A (CLNS1A) antibody (ABIN933127)

Immunofluorescence labeling of CLNS1A in HeLa cells (HeLa) using ABIN933127 (A) or an independent antibody (B). The signal disappears after CLNS1A knock-down (HeLa/kd).