

Datasheet for 200-301-G49**Sodium-Iodide Symporter Antibody****Overview**

Description:	Anti-Sodium-Iodide Symporter (MOUSE) Monoclonal Antibody - 200-301-G49
Item No.:	200-301-G49
Size:	100 µg
Applications:	IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Mouse

Product Details

Background:	The sodium iodide symporter (NIS) is an ion pump that actively transports iodide across the basolateral membrane into thyroid epithelial cells. This is important step in the process of iodide organification and the formation of triiodothyronine and thyroxine.
Synonyms:	NIS, SLC5A5, solute carrier family 5, Na (+)I(-) cotransporter, Sodium/iodide cotransporter,
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	14F
Format:	IgG1

Target Details

Gene Name:	SLC5A5
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Other
Immunogen:	Sodium-Iodide Symporter Antibody was produced in mice by repeated immunizations raised against mannose binding protein hNIS fusion.

Purity/Specificity: Anti-Sodium-Iodide Symporter Antibody was purified by Protein G chromatography. A BLAST analysis was used to suggest cross-reactivity with Sodium-Iodide Symporter from Human, Mouse, and Rat based on 100% homology with the immunizing sequence. Recognizes both rod and cone alpha subunits. Cross-reactivity with Sodium-Iodide Symporter from other sources has not been determined. Ion Channels research.

Relevant Links:

- [NCBI - NP_000444.1](#)
- [GeneID - 6528](#)
- [UniProtKB - Q92911](#)

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-Sodium-Iodide Symporter Antibody is tested in WB and IHC-P. Expect a band approximately 97kD, non-glycosylated version at 68kD. Other minor bands associated with hNIS at 160 kDa, and degradation products at ~30 kDa, and ~15kDa on specific lysates. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IHC:	1:1000
WB:	1:1000

Formulation

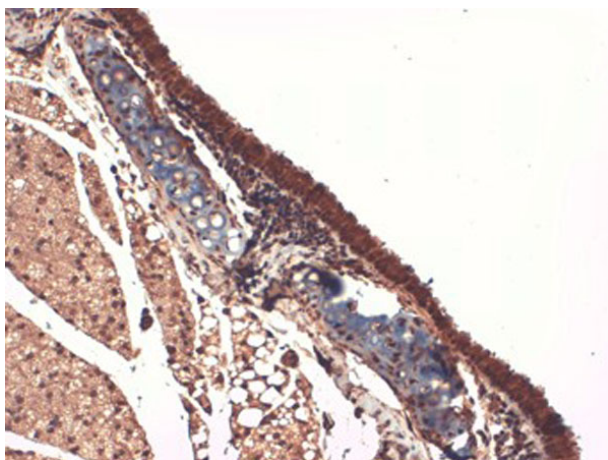
Physical State:	Liquid (sterile filtered)
Concentration:	1mg/mL by UV absorbance at 280 nm
Buffer:	1X PBS, pH 7.4
Preservative:	0.09% (w/v) Sodium Azide
Stabilizer:	50% (v/v) Glycerol

Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration:

Expiration date is one (1) year from date of receipt.

Images**Immunohistochemistry**

Immunohistochemistry of Mouse Anti-Sodium Iodide Symporter Monoclonal Antibody.

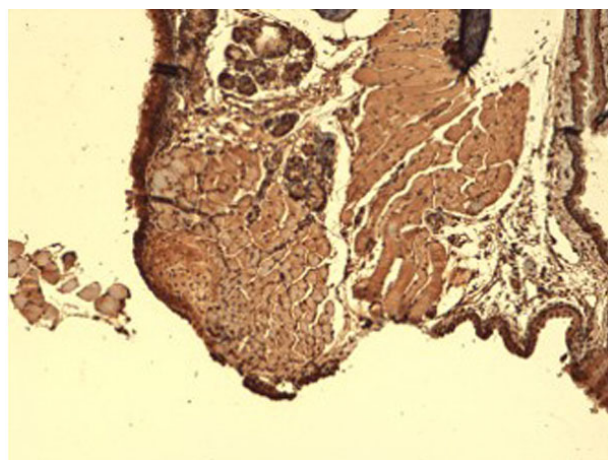
Tissue: mouse trachea.

Fixation: 10% Formalin solution for 12-24 hours at RT.

Primary Antibody: Mouse Anti-Sodium Iodide Symporter Monoclonal Antibody at 1:1000 for 1 hour at RT.

Secondary Antibody: Biotinylated Goat Anti-Mouse, Streptavidin Peroxidase, DAB Chromogen (brown) for 30 minutes at RT.

Counterstain: Mayer Hematoxylin (purple/blue) nuclear stain at 250-500 μ l for 5 minutes at RT.

**Immunohistochemistry**

Immunohistochemistry of Mouse Anti-Sodium Iodide Symporter.

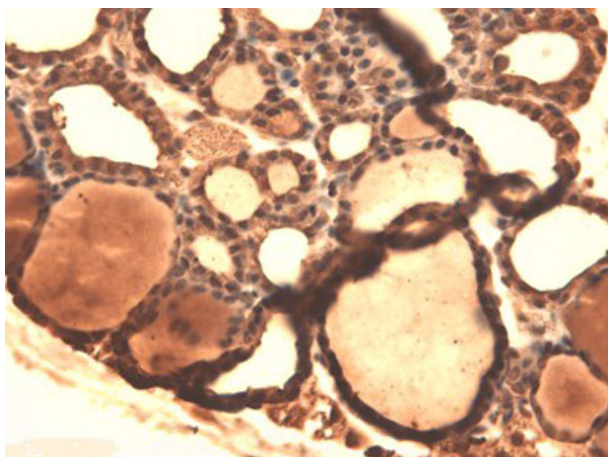
Tissue: mouse thyroid.

Fixation: 10% Formalin solution for 12-24 hours at RT.

Primary Antibody: Mouse Anti-Sodium Iodide Symporter Monoclonal Antibody at 1:1000 for 1 hour at RT.

Secondary Antibody: Biotinylated Goat Anti-Mouse, Streptavidin Peroxidase, DAB Chromogen (brown) for 30 minutes at RT.

Counterstain: Mayer Hematoxylin (purple/blue) nuclear stain at 250-500 μ l for 5 minutes at RT.

**Immunohistochemistry**

Immunohistochemistry of Mouse Anti-Sodium Iodide Symporter.

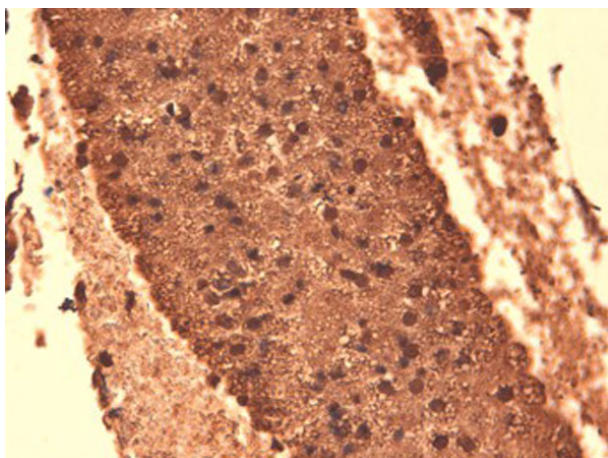
Tissue: mouse thyroid.

Fixation: 10% Formalin solution for 12-24 hours at RT.

Primary Antibody: Mouse Anti-Sodium Iodide Symporter Monoclonal Antibody at 1:1000 for 1 hour at RT.

Secondary Antibody: Biotinylated Goat Anti-Mouse, Streptavidin Peroxidase, DAB Chromogen (brown) for 30 minutes at RT.

Counterstain: Mayer Hematoxylin (purple/blue) nuclear stain at 250-500 μ l for 5 minutes at RT.

**Immunohistochemistry**

Immunohistochemistry of Mouse Anti-Sodium Iodide Symporter.

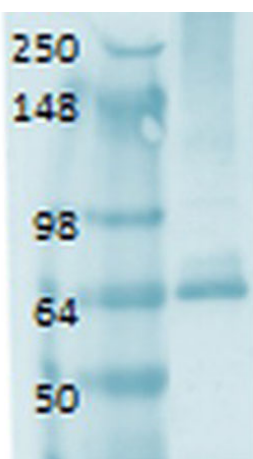
Tissue: Mouse thyroid.

Fixation: 10% Formalin solution for 12-24 hours at RT.

Primary Antibody: Mouse Anti-Sodium Iodide Symporter Monoclonal Antibody at 1:1000 for 1 hour at RT.

Secondary Antibody: Biotinylated Goat Anti-Mouse, Streptavidin Peroxidase, DAB Chromogen (brown) for 30 minutes at RT.

Counterstain: Mayer Hematoxylin (purple/blue) nuclear stain at 250-500 μ l for 5 minutes at RT.

**Western Blot**

Western Blot of Anti-Sodium Iodide Symporter.

Load: Human thyroid lysate.

Primary Antibody: Mouse Anti-Sodium Iodide Symporter Monoclonal Antibody at 1:1000.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.