10320 Camino Santa Fe, Suite G
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Sodium-Iodide Symporter Antibody
Sodium Iodide Symporter Antibody, Clone FP5
Catalog # ASM10225

Specification

Sodium-Iodide Symporter Antibody - Product Information

Application	**IHC, WB**
Primary Accession	Q92911
Other Accession	NP_000444.1
Host	**Mouse**
Isotype	**IgG1 Kappa**
Reactivity	**Human, Mouse, Rat**
Clonality	**Monoclonal**
Format	**FITC**

Description
Mouse Anti-Human Sodium-Iodide Symporter Monoclonal IgG1 Kappa

Target/Specificity
Detects ~97kDa, non-glycosylated version at 68kDa. Other minor bands associated with hNIS at 160kDa, and degradation products at ~30 kDa, and ~15kDa.

Other Names
NIS Antibody, SLC5A5 Antibody, solute carrier family 5 Antibody, Na (+)I(-) cotransporter Antibody

Immunogen
Mannose binding protein hNIS fusion (AA468-643)

Purification
Protein G Purified

Storage	**-20ºC**

Storage Buffer
PBS pH7.4, 50% glycerol, 0.09% sodium azide

Shipping Temperature	**Blue Ice or 4ºC**

Certificate of Analysis
1 µg/ml of SMC-391 was sufficient for detection of hNIS in 20 µg of transfected COS-7 cell membrane lysate by ECL immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization
Membrane

Sodium-Iodide Symporter Antibody - Protocols

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

- Western Blot
- Blocking Peptides

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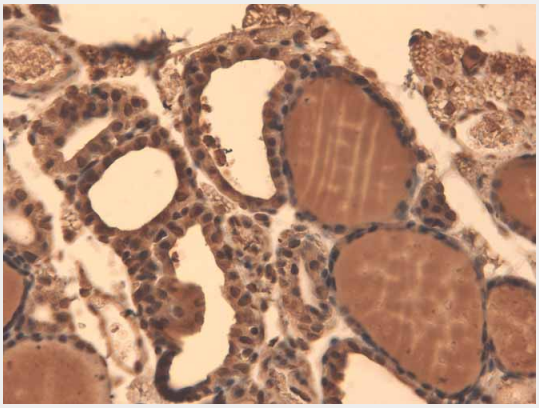
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Sodium-Iodide Symporter Antibody - Images



Immunohistochemistry analysis using Mouse Anti-Sodium Iodide Symporter Monoclonal Antibody, Clone 14F (ASM10225). Tissue: Thyroid. Species: Mouse. Fixation: 10% Formalin Solution for 12-24 hours at RT. Primary Antibody: Mouse Anti-Sodium Iodide Symporter Monoclonal Antibody (ASM10225) at 1:1000 for 1 hour at RT. Secondary Antibody: HRP/DAB Detection System: Biotinylated Goat Anti-Mouse, Streptavidin Peroxidase, DAB Chromogen (brown) for 30 minutes at RT. Counterstain: Mayer Hematoxylin (purple/blue) nuclear stain at 250-500 µl for 5 minutes at RT.

Western Blot analysis of Human thyroid lysate showing detection of Sodium Iodide Symporter protein using Mouse Anti-Sodium Iodide Symporter Monoclonal Antibody, Clone 14F (ASM10225). Primary Antibody: Mouse Anti-Sodium Iodide Symporter Monoclonal Antibody (ASM10225) at 1:1000.

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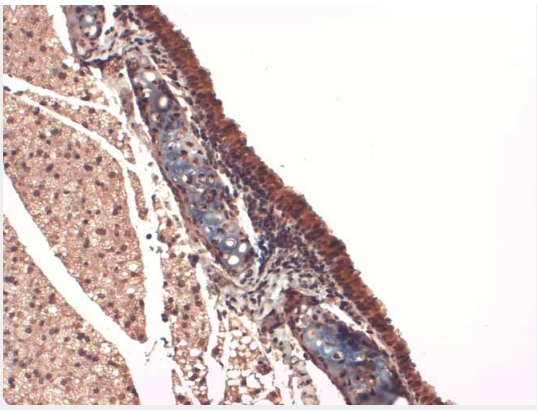
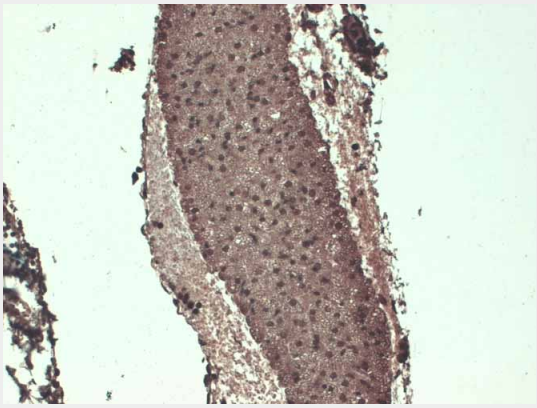
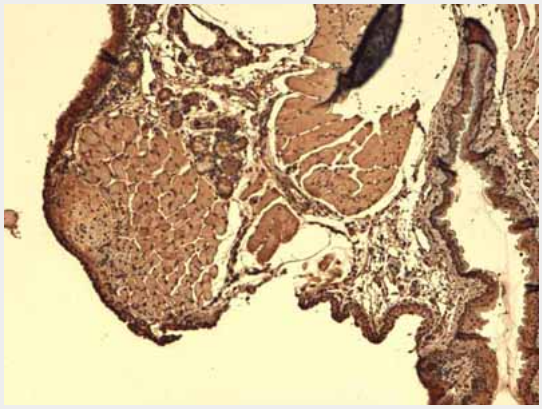


Immunohistochemistry analysis using Mouse Anti-Sodium Iodide Symporter Monoclonal Antibody, Clone 14F (ASM10225). Tissue: Trachea. Species: Mouse. Fixation: 10% Formalin Solution for 12-24 hours at RT. Primary Antibody: Mouse Anti-Sodium Iodide Symporter Monoclonal Antibody (ASM10225) at 1:1000 for 1 hour at RT. Secondary Antibody: HRP/DAB Detection System: Biotinylated Goat Anti-Mouse, Streptavidin Peroxidase, DAB Chromogen (brown) for 30 minutes at RT. Counterstain: Mayer Hematoxylin (purple/blue) nuclear stain at 250-500 µl for 5 minutes at RT.



Immunohistochemistry analysis using Mouse Anti-Sodium Iodide Symporter Monoclonal Antibody, Clone 14F (ASM10225). Tissue: Thyroid. Species: Mouse. Fixation: 10% Formalin Solution for 12-24 hours at RT. Primary Antibody: Mouse Anti-Sodium Iodide Symporter Monoclonal Antibody (ASM10225) at 1:1000 for 1 hour at RT. Secondary Antibody: HRP/DAB Detection System: Biotinylated Goat Anti-Mouse, Streptavidin Peroxidase, DAB Chromogen (brown) for 30 minutes at RT. Counterstain: Mayer Hematoxylin (purple/blue) nuclear stain at 250-500 µl for 5 minutes at RT.



Immunohistochemistry analysis using Mouse Anti-Sodium Iodide Symporter Monoclonal Antibody,

Clone 14F (ASM10225). Tissue: Thyroid. Species: Mouse. Fixation: 10% Formalin Solution for 12-24 hours at RT. Primary Antibody: Mouse Anti-Sodium Iodide Symporter Monoclonal Antibody (ASM10225) at 1:1000 for 1 hour at RT. Secondary Antibody: HRP/DAB Detection System: Biotinylated Goat Anti-Mouse, Streptavidin Peroxidase, DAB Chromogen (brown) for 30 minutes at RT. Counterstain: Mayer Hematoxylin (purple/blue) nuclear stain at 250-500 µl for 5 minutes at RT.

Sodium-Iodide Symporter Antibody - Background

The sodium iodide symporter (NIS) is an ion pump that actively transports iodide across the basolateral membrane into thyroid epithelial cells (1, 2). This is important step in the process of iodide organificaton and the formation of triiodothyronine and thyroxine (3).

Sodium-Iodide Symporter Antibody - References

1. Dai G., Levy O., Carrasco N. (1996) Nature. 379(6564): 458-460.
2. Snabik P.A., et al. (1997) Endocrin. 138(8): 3555-3558.
3. Dohan O., et al. (2007) Proc Natl Acad Sci USA. 104(51): 20250-20255.