

**Sodium-Iodide Symporter Antibody**  
**Sodium Iodide Symporter Antibody, Clone FP5**  
**Catalog # ASM10225****Specification**

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**Sodium-Iodide Symporter Antibody - Product Information**

Application	<b>IHC, WB</b>
Primary Accession	<a href="#">O92911</a>
Other Accession	<a href="#">NP_000444.1</a>
Host	<b>Mouse</b>
Isotype	<b>IgG1 Kappa</b>
Reactivity	<b>Human, Mouse, Rat</b>
Clonality	<b>Monoclonal</b>
Format	<b>APC</b>

**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 **-20°C**

**Storage Buffer**

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

Shipping Temperature

**Blue Ice or 4°C**

**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

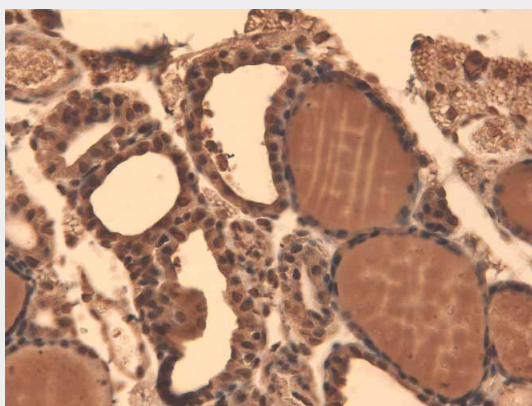
**Sodium-Iodide Symporter Antibody - Protocols**

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

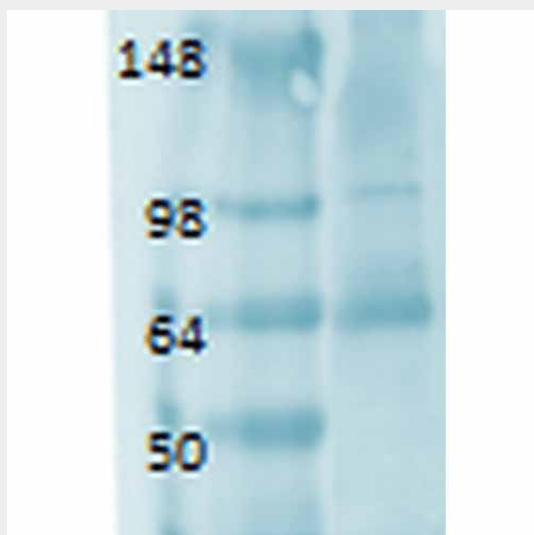
- [Western Blot](#)
- [Blocking Peptides](#)

- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

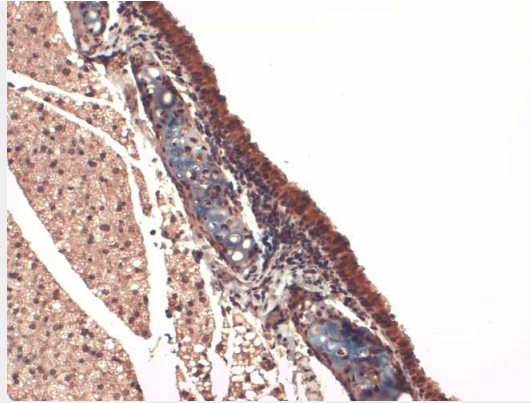
### Sodium-Iodide Symporter Antibody - Images



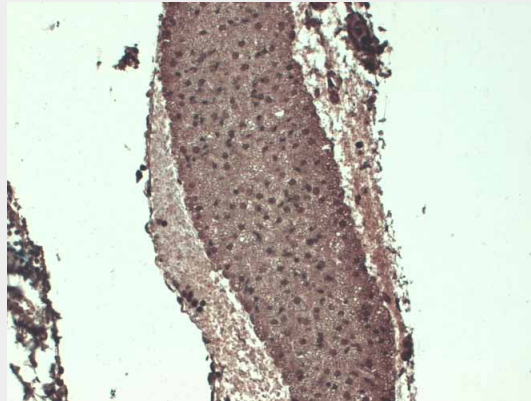
Immunohistochemistry analysis using Mouse Anti-Sodium Iodide Symporter Monoclonal Antibody, Clone 14F (ASM10225). Tissue: Thyroid. Species: Mouse. Fixation: 10% Formalin Solution for 12-24 hours at RT. Primary Antibody: Mouse Anti-Sodium Iodide Symporter Monoclonal Antibody (ASM10225) at 1:1000 for 1 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  $\mu$ l for 5 minutes at RT.



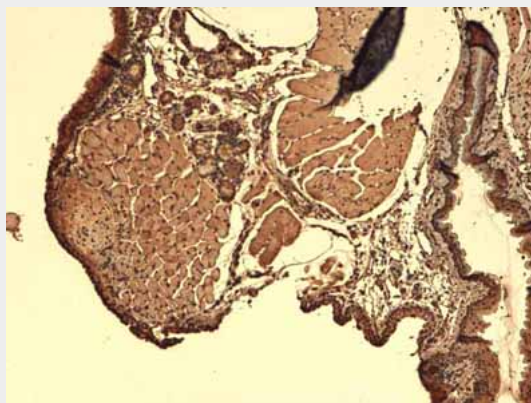
Western Blot analysis of Human thyroid lysate showing detection of Sodium Iodide Symporter protein using Mouse Anti-Sodium Iodide Symporter Monoclonal Antibody, Clone 14F (ASM10225). Primary Antibody: Mouse Anti-Sodium Iodide Symporter Monoclonal Antibody (ASM10225) at 1:1000.



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  $\mu$ l 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  $\mu$ l 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 organification 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.