

Sodium-Iodide Symporter Antibody

Sodium Iodide Symporter Antibody, Clone FP5 Catalog # ASM10225

Specification

Sodium-Iodide Symporter Antibody - Product Information

Application
Primary Accession
Other Accession
Host
Isotype
Reactivity

IHC, WB

092911
NP_000444.1
Mouse
IgG1 Kappa
Human, Mouse,

Rat

Clonality Monoclonal

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)

PurificationProtein G Purified

Storage -20°C

Storage Buffer

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

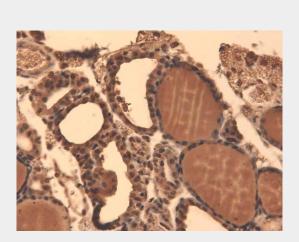
Shipping Blue Ice or 4°C

Temperature

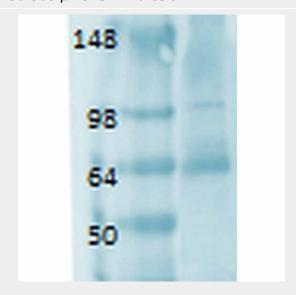
Certificate of Analysis

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

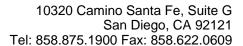
Cellular Localization



Immunohistochemistry analysis using Mouse Anti-Sodium lodide 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 lodide 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





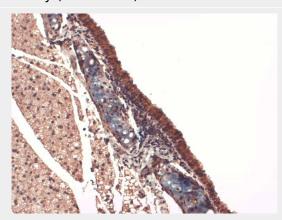
Membrane

Sodium-Iodide Symporter Antibody - Protocols

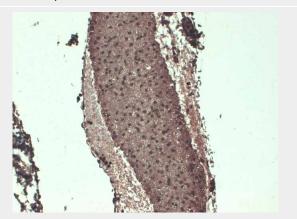
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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.



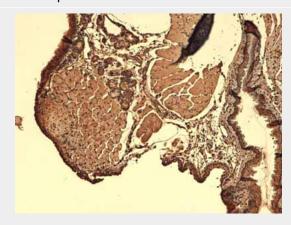
Immunohistochemistry analysis using Mouse Anti-Sodium lodide Symporter Monoclonal Antibody, Clone 14F (ASM10225). Tissue: Trachea. Species: Mouse. Fixation: 10% Formalin Solution for 12-24 hours at RT. Primary Antibody: Mouse Anti-Sodium lodide Symporter Monoclonal Antibody (ASM10225) at 1:1000 for 1 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 lodide 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 lodide 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.