# Mouse Sodium-Iodide Symporter Monoclonal Antibody | anti-SLC5A5 antibody

Sodium-Iodide Symporter Antibody: RPE

| CATALOG # | HOST | REACTIVITY | APPLICATIONS |
|---|---|---|---|
| **AAA102955** | **Mouse** | **Human, Mouse, Rat** | **Western Blot** |

## PRODUCT SYNONYMS

Sodium-Iodide Symporter; Monoclonal Antibody; Sodium-Iodide Symporter Antibody: RPE; NIS; SLC5A5; solute carrier family 5; Na (+)I(-) cotransporter; anti-SLC5A5 antibody

## PRODUCT SPECIFICATIONS

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| **Host** | Mouse |
| **Reactivity** | Human, Mouse, Rat |
| **Clonality** | Monoclonal |
| **Isotype** | IgG1 |
| **Clone Number** | 14F |
| **Form/Format** | Protein G Purified |
| **Concentration** | 1mg/mL (varies by lot) |
| **Sequence Length** | 643 |
| **Applicable Applications for anti-SLC5A5 antibody** | WB (Western Blot) |
| **Conjugate** | RPE |
| **Storage Buffer** | PBS pH7.4, 50% glycerol, 0.09% sodium azide |
| **Preparation and Storage** | -20 degree C |

## IMAGES

**IHC (Immunohistochemistry)**
Immunohistochemistry analysis using Mouse Anti-Sodium Iodide Symporter Monoclonal Antibody, Clone 14F. Tissue: Thyroid. Species: Mouse. 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: 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 ul for 5 minutes at RT.

**IHC (Immunohistochemistry)**
Immunohistochemistry analysis using Mouse Anti-Sodium Iodide Symporter Monoclonal Antibody, Clone 14F. Tissue: Thyroid. Species: Mouse. 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: 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 ul for 5 minutes at RT.

**IHC (Immunohistochemisry)**
Immunohistochemistry analysis using Mouse Anti-Sodium Iodide Symporter Monoclonal Antibody, Clone 14F. Tissue: Trachea. Species: Mouse. 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: 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 ul for 5 minutes at RT.

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

**IHC (Immunohistochemistry)**
Immunohistochemistry analysis using Mouse Anti-Sodium Iodide Symporter Monoclonal Antibody, Clone 14F. Tissue: Thyroid. Species: Mouse. 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: 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 ul for 5 minutes at RT.

## ADDITIONAL INFORMATION

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| **Related Product Information for anti-SLC5A5 antibody** | **Background Info:** Apparent mol. wt of 97kD, non-glycosylated version at 68kD. Other minor bands associated with hNIS at160kDa, and degradation products at ~30 kDa, and ~15kDa.<br><br>**Scientific 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). |
| **Product Categories/Family for anti-SLC5A5 antibody** | Transporters |
| **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. |

## NCBI AND UNIPROT INFORMATION

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| **NCBI GI #** | 4507035 |
| **NCBI GeneID** | 6528 |
| **NCBI Accession #** | NP_000444.1 |
| **NCBI GenBank Nucleotide #** | NM_000453.2 |
| **UniProt Accession #** | Q92911; O43702; Q2M335; Q9NYB6 |
| **Molecular Weight** | 68,666 Da |
| **NCBI Official Full Name** | sodium/iodide cotransporter |
| **NCBI Official Synonym Full Names** | solute carrier family 5 (sodium/iodide cotransporter), member 5 |
| **NCBI Official Symbol** | SLC5A5 |
| **NCBI Official Synonym Symbols** | NIS; TDH1 |
| **NCBI Protein Information** | sodium/iodide cotransporter; Na(+)/I(-) symporter; Na(+)/I(-) cotransporter; solute carrier family 5 (sodium iodide symporter), member 5 |

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| **UniProt Protein Name** | Sodium/iodide cotransporter |
| **UniProt Gene Name** | **SLC5A5** |
| **UniProt Synonym Gene Names** | NIS; Na(+)/I(-) cotransporter; Na(+)/I(-) symporter |
| **UniProt Entry Name** | SC5A5_HUMAN |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: https://stage.aaabiotech.com/monoclonal/sodium-iodide-symporter-antibody-clone-14f-western-blot-elisa/102955