

## Rabbit Anti-NIS antibody

SL0448R

**Product Name** NIS

**Chinese Name** 钠碘转运体蛋白抗体

**Alias**

Na(+)/I(-) cotransporter; Na(+)/I(-) symporter; Na(+)/I(-) cotransporter; Na(+)/I(-) symporter; Na+/I- cotransporter; Na+/I-symporter; NIS; SC5A5\_HUMAN; SLC5A5; sodium iodide symporter; Sodium-iodide symporter; Sodium/iodide cotransporter; Solute carrier family 5 (sodium iodide symporter) member 5; Solute carrier family 5; Solute carrier family 5 member 5.

**Research Area**

immunology Channel protein Transporter

**Immunogen Species**

Rabbit

**Clonality**

Polyclonal

**React Species** Mouse, Rat, (predicted: Human, )

WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)

**Applications**

not yet tested in other applications.

optimal dilutions/concentrations should be determined by the end user.

**Theoretical molecular weight**

68kDa

**Cellular localization**

cytoplasmic

**Form**

Liquid

**Concentration** 1mg/ml

**immunogen**

KLH conjugated synthetic peptide derived from human NIS: 525-618/618 <Cytoplasmic>

**Lsotype**

IgG

**Purification**

affinity purified by Protein A

**Buffer Solution**

1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

**Storage**

Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

**Attention**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**PubMed**

[PubMed](#)

catalyzes Na<sup>+</sup>/I<sup>-</sup> symporter activity plays a role in iodide transport and thyroid hormone generation.

Human Sodium Iodide Symporter (hNIS) is responsible for iodide concentrating ability within thyroid follicular cells. It is a membrane bound glycoprotein with 13 membrane spanning domains and 14 extramembranous domains. It may represent an autoantigen in thyroid.

**Function:**

Mediates iodide uptake in the thyroid gland.

**Subcellular Location:**

Membrane; Multi-pass membrane protein.

**Tissue Specificity:**

Expression is primarily in thyroid tissue, but also to a lower extent in mammary gland and ovary. Expression is reduced in tumors.

**DISEASE:**

Thyroid dysmorphogenesis 1 (TDH1) [MIM:274400]: A disorder characterized by the inability of the thyroid to maintain a concentration difference of readily exchangeable iodine between the plasma and the thyroid gland, leading to congenital hypothyroidism. Note=The disease is caused by mutations affecting the gene represented in this entry.

**Product Detail**

**Similarity:**

Belongs to the sodium:solute symporter (SSF) (TC 2.A.21) family.

**SWISS:**

Q99PN0

**Gene ID:**

6528

**Database links:**

[Entrez Gene: 6528](#) Human

[Entrez Gene: 114613](#) Rat

[Omim: 601843](#) Human

[SwissProt: Q92911](#) Human

[SwissProt: Q63008](#) Rat

[Unigene: 103983](#) Human

[Unigene: 584804](#) Human

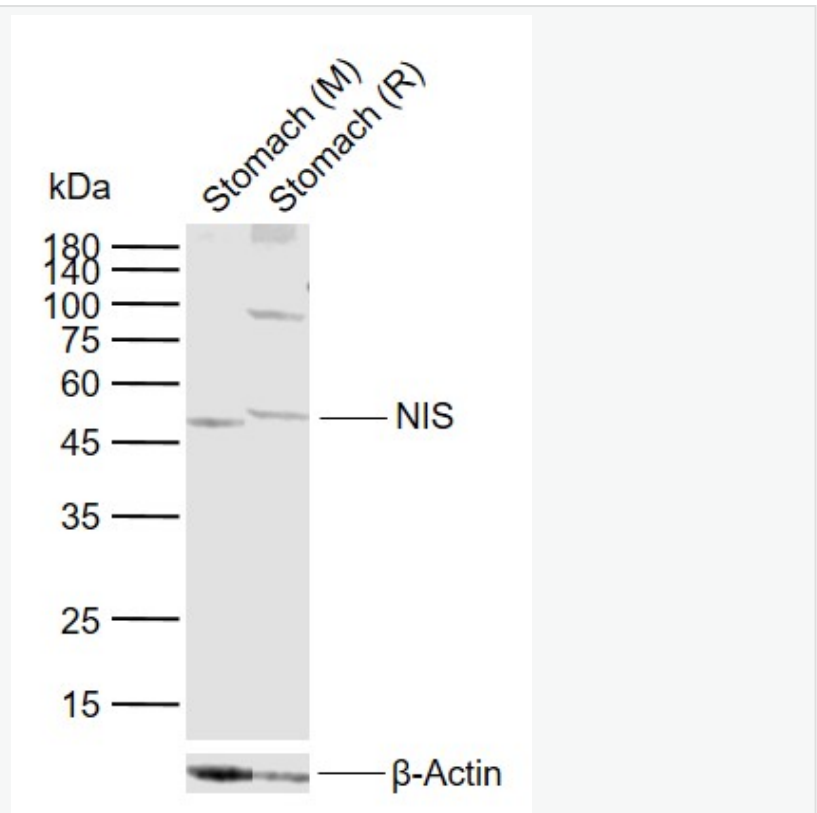
[Unigene: 10505](#) Rat

钠/碘转运体蛋白-NIS，是位于甲状腺细胞基底膜上的一类膜抗原，在甲状腺对碘的主动转运过程中发挥重要作用。

钠/碘 Transporter 受甲状腺刺激素(TSH)、碘、cell factor 和生长因子等多种因素的广泛调节。自身免疫性甲状腺疾病时 NIS 的表达发生了明显变化，患者体内出现抗 NIS 自身抗体。

此外，NIS 还与甲状腺冷结节和先天性甲状腺机能减退等甲状腺疾病的发病机理密切相关，近年来得到了足够的重视。

**Product  
Picture**



Sample:

Lane 1: Mouse Stomach tissue lysates

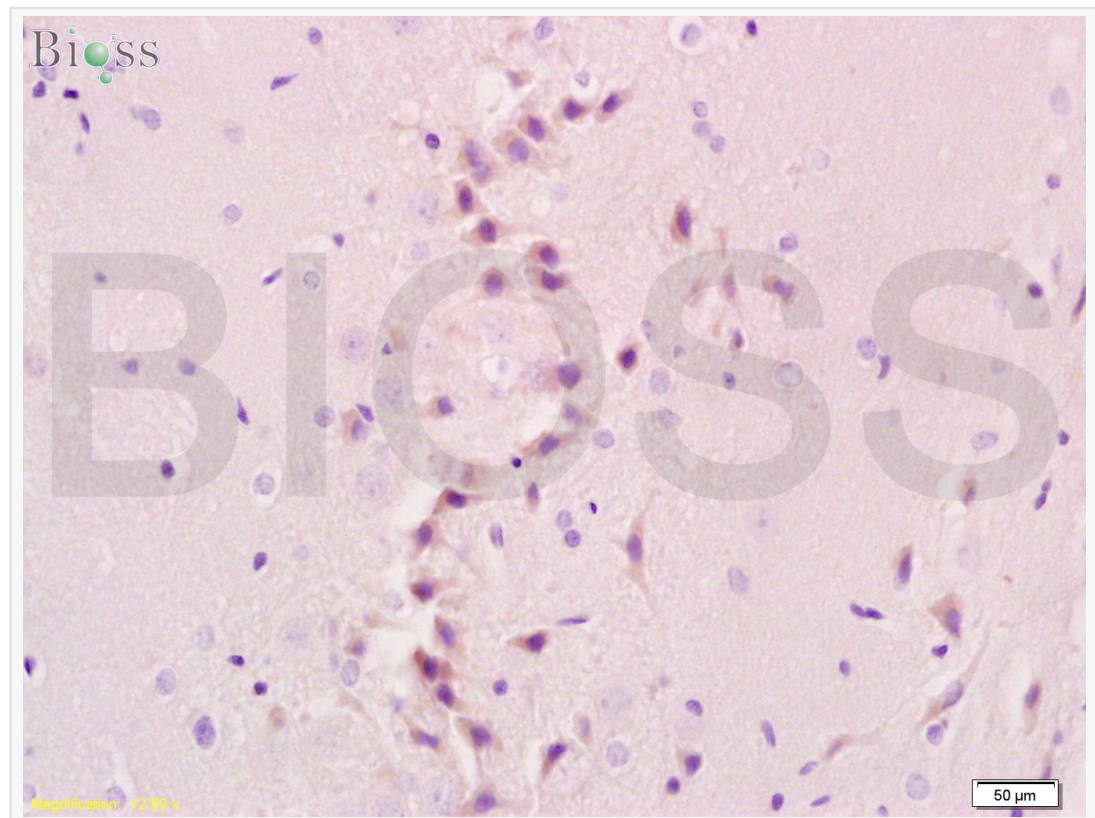
Lane 2: Rat Stomach tissue lysates

Primary: Anti-NIS (SL0448R) at 1/200 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 68 kDa

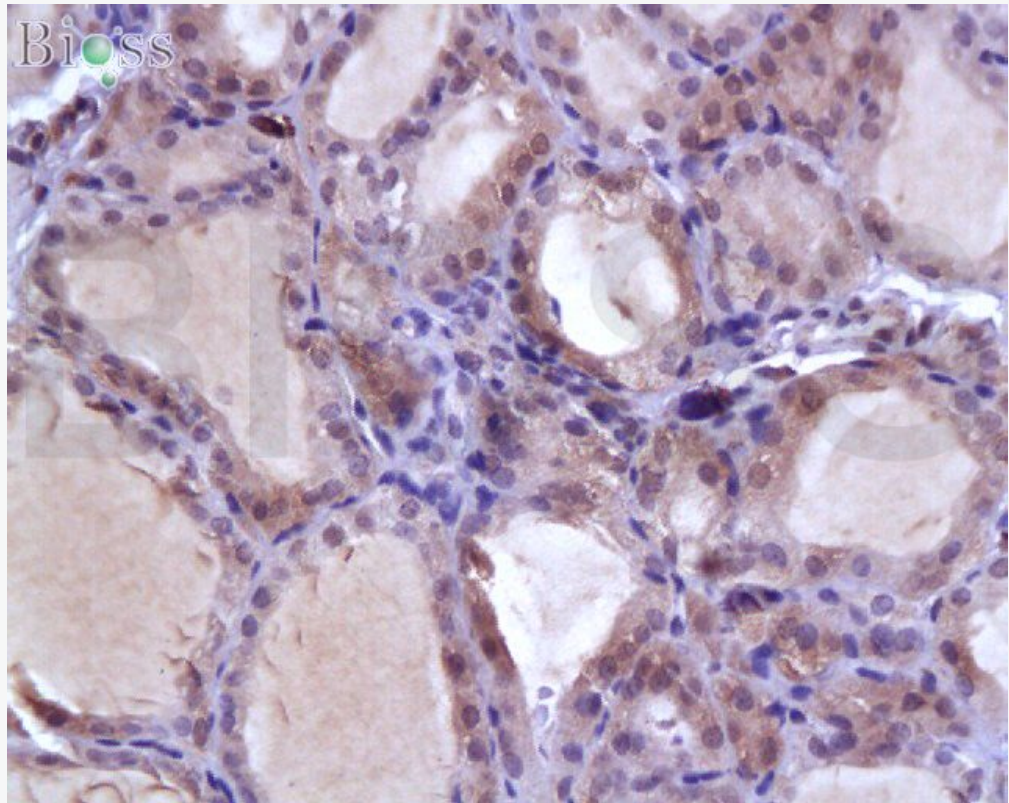
Observed band size: 48 kDa



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer ( 1M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-NIS Polyclonal Antibody, Unconjugated(SL0448R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat thyroid gland; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer ( 1M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-NIS Polyclonal Antibody, Unconjugated(SL0448R) 1:200,



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overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023)  
and DAB(C-0010) staining