

For Research Use Only

Sodium iodide symporter Polyclonal antibody



Catalog Number: 24324-1-AP

40 Publications

Basic Information

Catalog Number: 24324-1-AP	GenBank Accession Number: BC105047	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 1200 µg/ml by Nanodrop and 767 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 6528	Recommended Dilutions: WB 1:500-1:1000 IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate IHC 1:20-1:200
Source: Rabbit	Full Name: solute carrier family 5 (sodium iodide symporter), member 5	
Isotype: IgG	Calculated MW: 643 aa, 69 kDa	
Immunogen Catalog Number: AG19504	Observed MW: 50-55 kDa, 75-100 kDa	

Applications

Tested Applications:
FC, IHC, IP, WB, ELISA

Cited Applications:
ChIP, FC, IF, IHC, IP, WB

Species Specificity:
human, mouse, rat

Cited Species:
human, rat, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : mouse testis tissue, mouse stomach tissue, SGC-7901 cells

IP : mouse testis tissue,

IHC : human thyroid cancer tissue, human ovary tissue

Background Information

The sodium iodide symporter (Na⁺/I⁻ symporter, NIS), encoded by SLC5A5, is an integral plasma membrane glycoprotein that plays an important role in iodide uptake by thyroid cells. Expression of sodium iodide symporter has also been found in extra-thyroidal tissues, including gastric mucosa, lactating mammary gland and salivary glands. Increased expression of sodium iodide symporter has been found in thyroid tissue from patients with Graves' disease as well as papillary thyroid carcinomas. In addition, sodium iodide symporter was found to express in majority of breast cancer tissue but not in normal tissue. Sodium iodide symporter can be a promising diagnostic and therapeutic tool for thyroid cancer and breast cancer. This antibody recognizes the mature approximately 75-100 kDa protein and a partially glycosylated 50-55 kDa protein. (PMID: 12588808, 9525971)

Notable Publications

Author	Pubmed ID	Journal	Application
Jun Wang	32940055	Hum Gene Ther	IF
Martin L Read	34520744	Cell Chem Biol	WB
Jianlu Song	30323976	Am J Cancer Res	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

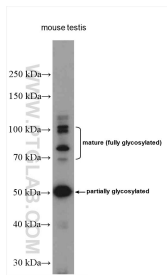
For technical support and original validation data for this product please contact:

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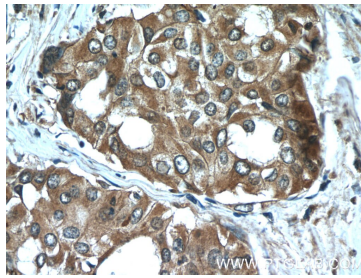
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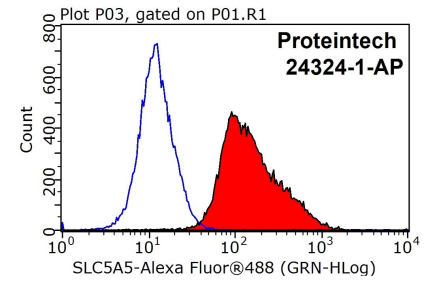
Selected Validation Data



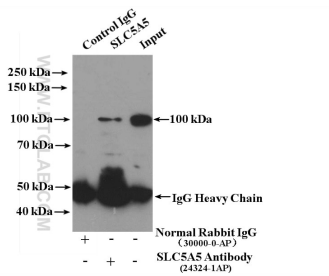
mouse testis tissue were subjected to SDS PAGE followed by western blot with 24324-1-AP (Sodium iodide symporter antibody at dilution of 1:600 incubated at room temperature for 1.5 hours.



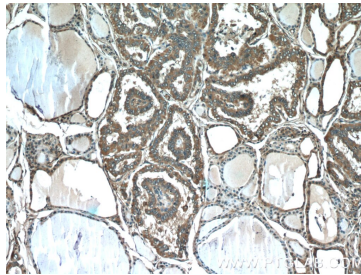
Immunohistochemical analysis of paraffin-embedded human thyroid cancer tissue slide using 24324-1-AP (Sodium iodide symporter antibody at dilution of 1:50 (under 40x lens).



1X10⁶ MCF-7 cells were stained with 0.2ug Sodium iodide symporter antibody (24324-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:100.



IP Result of anti-Sodium iodide symporter (IP:24324-1-AP, 4ug; Detection:24324-1-AP 1:500) with mouse testis tissue lysate 4000ug.



Immunohistochemical analysis of paraffin-embedded human thyroid cancer tissue slide using 24324-1-AP (Sodium iodide symporter antibody at dilution of 1:50 (under 10x lens).