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NIS Rabbit pAb

Catalog # AP98319

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q92911
Other Accession	Q92911
Reactivity	Rat, Mouse
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	68666
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human NIS
Epitope Specificity	525-618/618
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the sodium:solute symporter (SSF) (TC 2.A.21) family.
DISEASE	Thyroid dyshormonogenesis 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.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	catalyzes Na+/I- 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.

Additional Information

Gene ID	6528
Other Names	NIS; TDH1; SC5A5_HUMAN; SLC5A5; Na(+)/I(-) cotransporter; Natrium iodide transporter; Sodium-iodide symporter (Na(+)/I(-) symporter); Solute carrier family 5 member 5; SC5A5_RAT; solute carrier family 5 (sodium iodide symporter), member 5; solute carrier family 5 (sodium/iodide cotransporter), member 5; sodium iodide symporter
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	SLC5A5
Synonyms	NIS {ECO:0000303|PubMed:32084174, ECO:00
Function	Sodium:iodide symporter that mediates the transport of iodide into the thyroid gland (PubMed:12488351, PubMed:18372236, PubMed:18708479, PubMed:20797386, PubMed:31310151, PubMed:32084174, PubMed:8806637, PubMed:9329364). Can also mediate the transport of chlorate, thiocynate, nitrate and selenocynate (PubMed:12488351).
Cellular Location	Cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q63008}. Cytoplasm
Tissue Location	Expression is primarily in thyroid tissue, but also to a lower extent in mammary gland and ovary. Expression is reduced in tumors.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.