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DUOXA2 Rabbit pAb

Catalog # AP96411

Product Information

Application	WB
Primary Accession	Q1HG44
Other Accession	Q1HG44
Reactivity	Mouse
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	34787
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human DUOXA2
Epitope Specificity	251-320/320
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 DUOXA family.
Post-translational modifications	N-glycosylated.
DISEASE	Defects in DUOXA2 are the cause of thyroid dyshormonogenesis 5 (TDH5) [MIM:274900]. A disorder due to thyroid dyshormonogenesis, causing hypothyroidism, goiter, and variable mental deficits derived from unrecognized and untreated hypothyroidism
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	DUOXA2 is a 320 amino acid multi-pass membrane protein that localizes to the endoplasmic reticulum (ER) and belongs to the DUOXA family. Expressed specifically in thyroid and salivary glands, DUOXA2 is essential for the maturation and transport of DUOX2 from the ER to the plasma membrane and is also thought to play a role in the synthesis of thyroid hormone (TH). Defects in the DUOXA2 gene are associated with the pathogenesis of congenital hypothyroidism, a disorder that affects infants and is characterized by a significant decrease or a complete deficiency of TH from birth. The gene encoding DUOXA2 maps to human chromosome 15, which houses over 700 genes and comprises nearly 3% of the human genome. Angelman syndrome, Prader-Willi syndrome, Tay-Sachs disease and Marfan syndrome are all associated with defects in chromosome 15-localized genes.

Additional Information

Gene ID	405753
Other Names	SIMNIPHOM; TDH5; DOXA2_HUMAN; DUOXA2; Dual oxidase activator 2; dual oxidase maturation factor 2

Dilution	WB=1:500-2000
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	DUOXA2
Function	Required for the maturation and transport of functional DUOX2 from the endoplasmic reticulum to the plasma membrane (PubMed:16651268). Recruits DUOX2 to the apical cell membrane (PubMed:39126279).
Cellular Location	Endoplasmic reticulum membrane; Multi-pass membrane protein. Apical cell membrane; Multi-pass membrane protein
Tissue Location	Specifically expressed in thyroid. Also detected in salivary glands.

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