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Rabbit Anti-DUOX2 antibody

SL11432R

Product Name:	DUOX2
Chinese Name:	双氧化酶2/甲状腺氧化酶2抗体
Alias:	Dual oxidase 2; Dual oxidase2; DUOX2; DUOX2_HUMAN; Large NOX 2; LNOX2; Long NOX 2; NADH/NADPH thyroid oxidase p138 tox; NADH/NADPH thyroid oxidase p138-tox; NADPH oxidase/peroxidase DUOX2; NADPH thyroid oxidase 2; NOXEF2; p138 thyroid oxidase; P138 TOX; THOX2; Thyroid oxidase 2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	173kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human DUOX2:501-600/1548
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	Dual oxidase 2 (DUOX2), also designated NADPH thyroid oxidase 2, p138 thyroid oxidase or large NOX2, localizes to the apical membrane of epithelial cells. DUOX1, also designated NADPH thyroid oxidase or large NOX1, and DUOX2 are multi-pass membrane proteins predominantly expressed in thyrocytes, tracheal surface epithelial

	cells as well as thyroid, colon, duodenum, trachea and bronchium. DUOX1 and DUOX2 generate hydrogen peroxide, which is crucial for thyroid peroxidase and lactoperoxidase. In mucosa, DUOX proteins are involved in thyroid hormone biosynthesis and lactoperoxidase-mediated antimicrobial defense. Defects in the gene encoding for DUOX2 cause congenital hypothyroidism (CH), a disorder characterized by a defect in hydrogen peroxide production in the thyroid gland. **Function:** Generates hydrogen peroxide which is required for the activity of thyroid peroxidase/TPO and lactoperoxidase/LPO. Plays a role in thyroid hormones synthesis and lactoperoxidase-mediated antimicrobial defense at the surface of mucosa. May have its own peroxidase activity through its N-terminal peroxidase-like domain. **Subunit:** Interacts with TXNDC11, TPO and CYBA. **Subcellular Location:** Apical cell membrane. Localizes to the apical membrane of epithelial cells. **Tissue Specificity:** Expressed in colon, small intestine, duodenum and tracheal surface epithelial cells (at protein level). Expressed in thyrocytes. Also detected in kidney, liver, lung, pancreas, prostate, salivary glands, rectum and testis. **Post-translational modifications:** N-glycosylated. **DISEASE:** Defects in DUOX2 are a cause of thyroid dyshormonogenesis 6 (TDH6) [MIM:607200]. A disorder due to a defective conversion of accumulated iodide to organically bound iodine. The iodide organification defect can be partial or complete. **Similarity:** In the N-terminal section; belongs to the peroxidase family. Contains 3 EF-hand domains. Contains 1 FAD-binding FR-type domain. Contains 1 ferric oxidoreductase domain. **SWISS:** Q9NRD8 **Gene ID:** 50506 **Database links:**

	Entrez Gene: 50506Human Entrez Gene: 79107Rat Omim: 606759Human SwissProt: Q9NRD8Human SwissProt: Q9ES45Rat Unigene: 71377Human Unigene: 55542Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.