

DUOX1 rabbit pAb

Catalog No :	YT6883
Reactivity :	Human;Rat
Applications :	WB
Target :	DUOX1
Fields :	>>Thyroid hormone synthesis
Gene Name :	DUOX1 DUOX LNOX1 THOX1
Protein Name :	DUOX1
Human Gene Id :	53905
Human Swiss Prot No :	Q9NRD9
Rat Gene Id :	266807
Rat Swiss Prot No :	Q8CIY2
Immunogen :	Synthesized peptide derived from human DUOX1 AA range: 1398-1448
Specificity :	This antibody detects endogenous levels of DUOX1 at Human/Rat
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1[?]500-2000
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml

Storage Stability : -15°C to -25°C/1 year (Do not lower than -25°C)

Molecularweight : 171kD

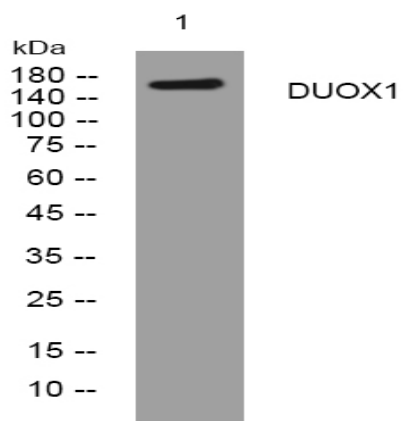
Background : The protein encoded by this gene is a glycoprotein and a member of the NADPH oxidase family. The synthesis of thyroid hormone is catalyzed by a protein complex located at the apical membrane of thyroid follicular cells. This complex contains an iodide transporter, thyroperoxidase, and a peroxide generating system that includes proteins encoded by this gene and the similar DUOX2 gene. This protein is known as dual oxidase because it has both a peroxidase homology domain and a gp91phox domain. This protein generates hydrogen peroxide and thereby plays a role in the activity of thyroid peroxidase, lactoperoxidase, and in lactoperoxidase-mediated antimicrobial defense at mucosal surfaces. Two alternatively spliced transcript variants encoding the same protein have been described for this gene. [provided by RefSeq, Jul 2012],

Function : catalytic activity:NAD(P)H + O(2) = NAD(P)(+) + H(2)O(2).,developmental stage:Widely expressed in fetal tissues.,enzyme regulation:The NADPH oxidase activity is calcium-dependent. Peroxidase activity is inhibited by aminobenzohydrazide.,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.,induction:By forskolin (at protein level). By thyrotropin and the Th2-specific cytokines IL-4 and IL-13.,pathway:Hormone biosynthesis; thyroid hormone biosynthesis.,PTM:N-glycosylated.,sequence caution:Translated as Arg.,similarity:Contains 1 FAD-binding FR-type domain.,similarity:Contains 1 ferric oxidoreductase domain.,similarity:Co

Subcellular Location : Apical cell membrane ; Multi-pass membrane protein . Localizes to the apical membrane of epithelial cells.

Expression : Expressed in thyrocytes and tracheal surface epithelial cells (at protein level). Expressed in thyroid, trachea, bronchium, and to a lower extent, in placenta, testis, prostate, pancreas and heart.

Products Images



Western blot analysis of lysates from MCF-7 cells, primary antibody was diluted at 1:1000, 4° over night