



DUOX1 mouse mAb

Catalog No	YP-mAb-11518
Isotype	IgG
Reactivity	Human;Rat
Applications	WB
Gene Name	DUOX1 DUOX LNOX1 THOX1
Protein Name	DUOX1
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	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	
Observed Band	
Cell Pathway	Apical cell membrane ; Multi-pass membrane protein . Localizes to the apical membrane of epithelial cells.
Tissue Specificity	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.
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



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],

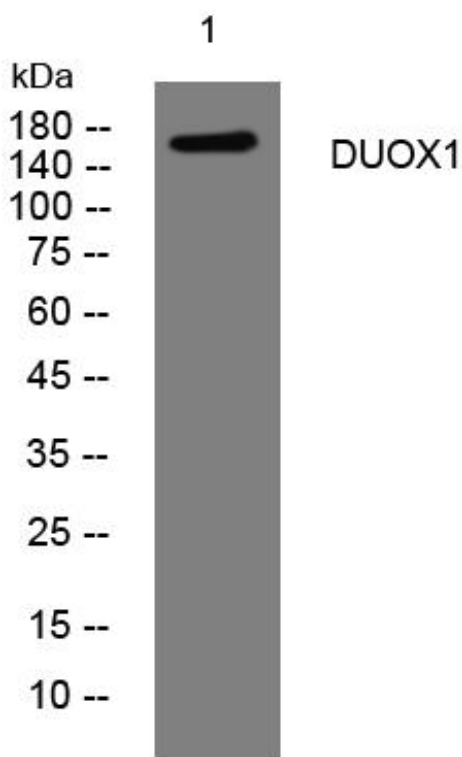
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using DUOX1 mouse mAb