

DUOX2 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11227c

Specification

DUOX2 Antibody (Center) - Product Information

Application	FC, WB,E
Primary Accession	O9NRD8
Other Accession	NP_054799
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	175364
Antigen Region	513-542

DUOX2 Antibody (Center) - Additional Information

Gene ID 50506

Other Names

Dual oxidase 2, 1111-, Large NOX 2, Long NOX 2, NADH/NADPH thyroid oxidase p138-tox, NADPH oxidase/peroxidase DUOX2, NADPH thyroid oxidase 2, Thyroid oxidase 2, p138 thyroid oxidase, DUOX2, LNOX2, THOX2

Target/Specificity

This DUOX2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 513-542 amino acids from the Central region of human DUOX2.

Dilution

FC~~1:10~50

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

DUOX2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

DUOX2 Antibody (Center) - Protein Information

Name DUOX2

Synonyms LNOX2, THOX2

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.

Cellular Location

Apical cell membrane; Multi-pass membrane protein. Cell junction. Note=Localizes to the apical membrane of epithelial cells. Localizes on internal membrane structures under resting conditions, translocates to the plasma membrane and cell-cell junctions upon challenge with enteric pathogens, such as Escherichia coli.

Tissue Location

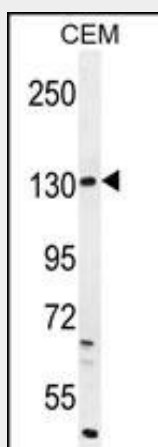
Expressed in colon, small intestine, duodenum and tracheal surface epithelial cells (at protein level). Expressed in thyrocytes. Also detected in kidney, liver, lung, pancreas, prostate, salivary glands, rectum and testis.

DUOX2 Antibody (Center) - Protocols

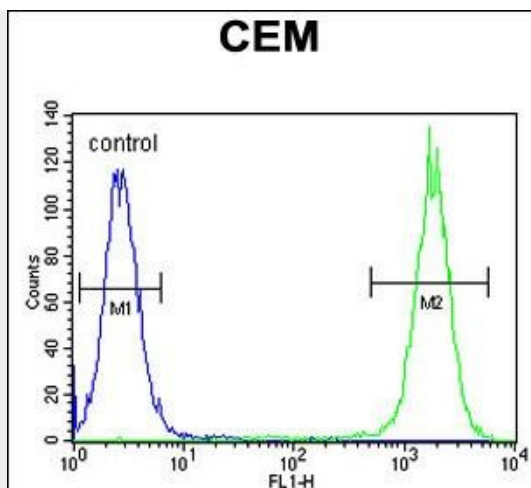
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

DUOX2 Antibody (Center) - Images



DUOX2 Antibody (Center) (Cat. #AP11227c) western blot analysis in CEM cell line lysates (35ug/lane). This demonstrates the DUOX2 antibody detected the DUOX2 protein (arrow).



DUOX2 Antibody (Center) (Cat. #AP11227c) flow cytometric analysis of CEM cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

DUOX2 Antibody (Center) - 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 this encoded protein and DUOX1. This protein is known as dual oxidase because it has both a peroxidase homology domain and a gp91phox domain.

DUOX2 Antibody (Center) - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Salmeen, A., et al. Oncogene 29(31):4473-4484(2010)
Linderholm, A.L., et al. Am. J. Physiol. Lung Cell Mol. Physiol. 299 (2), L215-L221 (2010) :
Roberts, K.E., et al. Gastroenterology 139(1):130-139(2010)
Hill, T. III, et al. Biochem. Biophys. Res. Commun. 395(2):270-274(2010)

DUOX2 Antibody (Center) - Citations

- [Inducible Lung Epithelial Resistance Requires Multisource Reactive Oxygen Species Generation To Protect against Viral Infections.](#)