

**DUOX2 Antibody (Center) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP11227c****Specification**

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**DUOX2 Antibody (Center) Blocking peptide - Product Information**Primary Accession [Q9NRD8](#)**DUOX2 Antibody (Center) Blocking peptide - 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

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**DUOX2 Antibody (Center) Blocking peptide - 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) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

### **DUOX2 Antibody (Center) Blocking peptide - Images**

### **DUOX2 Antibody (Center) Blocking peptide - 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) Blocking peptide - 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)