bs-11432R

[Primary Antibody]

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DATASHEET -

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

DUOX2 Rabbit pAb

GeneID: 50506 **SWISS:** Q9NRD8

Target: DUOX2

Immunogen: KLH conjugated synthetic peptide derived from human DUOX2:

501-600/1548.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50%

Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated

freeze/thaw cycles.

Background: 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.

Applications: IHC-P (1:100-500)

IHC-F (1:100-500) **IF** (1:100-500) ICC/IF (1:100-500) **ELISA** (1:5000-10000)

Reactivity: (predicted: Human, Mouse,

Rat, Dog)

Predicted 173 kDa

Subcellular Location: Cell membrane

— SELECTED CITATIONS —

- [IF=4.603] Zhang X et al. DUOX2 promotes the progression of colorectal cancer cells by regulating the AKT pathway and interacting with RPL3. Carcinogenesis. 2020 Jun 12;bgaa056. IHC; Human. 32531052
- [IF=4.603] Zhang Xue, et al. DUOX2 promotes the progression of colorectal cancer cells by regulating the AKT pathway and interacting with RPL3. Carcinogenesis. 2021 Feb;42(1):105-117 IHC; Human. 32531052
- [IF=4.8] Ma Yijun, et al. Aquaporin-7 Facilitates Proliferation and Adipogenic Differentiation of Mouse Bone Marrow Mesenchymal Stem Cells by Regulating Hydrogen Peroxide Transport. Stem Cell Reviews and Reports. 2023 Jul;:1-13 WB ;Mouse. 37432580
- [IF=2.819] Li et al. The Gastric Mucosa from Patients Infected with CagA+ or VacA+ Helicobacter pylori Has a Lower Level of Dual Oxidase-2 Expression than Uninfected or Infected with CagA-/VacA- H. pylori. (2016) Dig. Dis. Sc. 61:2328-37 IHC: Human. 27048452
- [IF=2.9] Zhang Xue. et al. HADHB mediates 5-fluorouracil sensitivity in colorectal cancer. Discov Oncol. 2025 Dec;16(1):1-15 IHC; Human. 40875107