

## DUOX1 (H-65): sc-98898

### BACKGROUND

Dual oxidase 1 (DUOX1), a homolog of glycoprotein p91Phox, is expressed in airway epithelium and generates reactive oxygen species (ROS). DUOX1, also designated NADPH thyroid oxidase or large NOX1, is a multi-pass membrane protein predominantly expressed in thyrocytes and tracheal surface epithelial cells, as well as thyroid, trachea and bronchium. DUOX1 generates hydrogen peroxide, which is crucial for thyroid peroxidase and lactoperoxidase. It is also involved in thyroid hormone synthesis and lactoperoxidase-mediated antimicrobial defense in mucosa. DUOX1, which also plays a role in Mucin expression, is widely expressed in fetal tissues.

### REFERENCES

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### CHROMOSOMAL LOCATION

Genetic locus: DUOX1 (human) mapping to 15q21.1; Duox1 (mouse) mapping to 2 E5.

### RESEARCH USE

For research use only, not for use in diagnostic procedures.

### SOURCE

DUOX1 (H-65) is a rabbit polyclonal antibody raised against amino acids 611-675 mapping within an internal region of DUOX1 of human origin.

### PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

### APPLICATIONS

DUOX1 (H-65) is recommended for detection of DUOX1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

DUOX1 (H-65) is also recommended for detection of DUOX1 in additional species, including canine.

Suitable for use as control antibody for DUOX1 siRNA (h): sc-60550, DUOX1 siRNA (m): sc-60551, DUOX1 shRNA Plasmid (h): sc-60550-SH, DUOX1 shRNA Plasmid (m): sc-60551-SH, DUOX1 shRNA (h) Lentiviral Particles: sc-60550-V and DUOX1 shRNA (m) Lentiviral Particles: sc-60551-V.

Molecular Weight of DUOX1: 150/165 kDa.

Positive Controls: Mv 1 Lu cell lysate: sc-3810 or A549 cell lysate: sc-2413.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **DUOX1 (H-9): sc-393096**, our highly recommended monoclonal alternative to DUOX1 (H-65).