

DUOXA1 (N-16): sc-83139

BACKGROUND

DUOXA1 (dual oxidase maturation factor 1), also known as NIP or NUMBIP, is a 343 amino acid multi-pass membrane protein that belongs to the DUOXA family and exists as multiple alternatively spliced isoforms. Expressed almost exclusively in thyroid tissue, but also present in esophageal tissue, DUOXA1 interacts with NUMB and is thought to be essential for the maturation and transport of functional DUOX1 from the endoplasmic reticulum to the plasma membrane. The gene encoding DUOXA1 maps to human chromosome 15, which houses over 700 genes and comprises nearly 3% of the human genome. Angelman syndrome, Prader-Willi syndrome, Tay-Sachs disease and Marfan syndrome are all associated with defects in chromosome 15-localized genes.

REFERENCES

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4. Fischer, H., et al. 2007. Developmental regulation of DUOX1 expression and function in human fetal lung epithelial cells. *Am. J. Physiol. Lung Cell Mol. Physiol.* 292: L1506-L1514.
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7. Ostrakhovitch, E.A. and Li, S.S. 2009. NIP1/DUOX1 expression in epithelial breast cancer cells: regulation of cell adhesion and actin dynamics. *Breast Cancer Res. Treat.* 119: 773-786.

CHROMOSOMAL LOCATION

Genetic locus: DUOXA1 (human) mapping to 15q21.1; Duoxa1 (mouse) mapping to 2 E5.

SOURCE

DUOXA1 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a N-terminal extracellular domain of DUOXA1 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.

Blocking peptide available for competition studies, sc-83139 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DUOXA1 (N-16) is recommended for detection of DUOXA1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with family member DUOXA2.

DUOXA1 (N-16) is also recommended for detection of DUOXA1 in additional species, including bovine.

Suitable for use as control antibody for DUOXA1 siRNA (h): sc-77192, DUOXA1 siRNA (m): sc-77193, DUOXA1 shRNA Plasmid (h): sc-77192-SH, DUOXA1 shRNA Plasmid (m): sc-77193-SH, DUOXA1 shRNA (h) Lentiviral Particles: sc-77192-V and DUOXA1 shRNA (m) Lentiviral Particles: sc-77193-V.

Molecular Weight of DUOXA1: 38 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (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.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.