

ANO1 (H-41): sc-135235

BACKGROUND

ANO1 (anoctamin 1), also known as DOG1, ORAOV2, TAOS2 or TMEM16A, is a 986 amino acid multi-pass membrane protein that localizes to both the cell membrane and the cytoplasm and belongs to the anoctamin family. Expressed in a variety of tissues with highest expression in liver, gastrointestinal muscle and skeletal muscle, ANO1 functions as a calcium-activated chloride channel that is required for normal tracheal development. Human ANO1 shares 90% sequence identity with its mouse counterpart, suggesting a conserved role between species. ANO1 is present in breast, pancreatic, gastric, and uterine cancers, as well as in neck, ovarian and parathyroid tumors, suggesting a role for ANO1 in carcinogenesis. Three isoforms of ANO1 exist due to alternative splicing events.

REFERENCES

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5. Kalay, E., et al. 2007. A novel locus for autosomal recessive nonsyndromic hearing impairment, DFNB63, maps to chromosome 11q13.2-q13.4. *J. Mol. Med.* 85: 397-404.
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CHROMOSOMAL LOCATION

Genetic locus: ANO1 (human) mapping to 11q13.3; Ano1 (mouse) mapping to 7 F5.

SOURCE

ANO1 (H-41) is a rabbit polyclonal antibody raised against amino acids 182-222 mapping within an internal region of ANO1 of human origin.

RESEARCH USE

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

PRODUCT

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

APPLICATIONS

ANO1 (H-41) is recommended for detection of ANO1 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).

ANO1 (H-41) is also recommended for detection of ANO1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ANO1 siRNA (h): sc-76686, ANO1 siRNA (m): sc-76687, ANO1 shRNA Plasmid (h): sc-76686-SH, ANO1 shRNA Plasmid (m): sc-76687-SH, ANO1 shRNA (h) Lentiviral Particles: sc-76686-V and ANO1 shRNA (m) Lentiviral Particles: sc-76687-V.

Molecular Weight of ANO1: 114 kDa.

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 or our catalog for detailed protocols and support products.


 MONOS
Satisfaction
Guaranteed

Try **ANO1 (C-5): sc-377115**, our highly recommended monoclonal alternative to ANO1 (H-41).