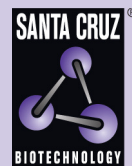


# ANO4 (T-13): sc-169625



The Power to Question

## BACKGROUND

ANO4 (anoctamin 4), also known as TMEM16D (transmembrane protein 16D), is a 955 amino acid multi-pass membrane protein. ANO4 is encoded by a gene that maps to chromosome 12 and is expressed as three isoforms due to alternative splicing events. Encoding over 1,100 genes within 132 million bases, chromosome 12 makes up about 4.5% of the human genome. A number of skeletal deformities are linked to chromosome 12, including hypochondrogenesis, achondrogenesis and Kniest dysplasia. Noonan syndrome, which is characterized by heart and facial developmental defects, is caused by a mutant form of the PTPN11 gene product, SH-PTP2. Chromosome 12 is also home to a homeobox gene cluster which encodes crucial transcription factors for morphogenesis, and the natural killer complex gene cluster encoding C-type lectin proteins which mediate the NK cell response to MHC I interaction.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: ANO4 (human) mapping to 12q23.1; Ano4 (mouse) mapping to 10 C1.

## SOURCE

ANO4 (T-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ANO4 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-169625 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ANO4 (T-13) is recommended for detection of ANO4 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 other ANO family members.

ANO4 (T-13) is also recommended for detection of ANO4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ANO4 siRNA (h): sc-95903, ANO4 siRNA (m): sc-154402, ANO4 shRNA Plasmid (h): sc-95903-SH, ANO4 shRNA Plasmid (m): sc-154402-SH, ANO4 shRNA (h) Lentiviral Particles: sc-95903-V and ANO4 shRNA (m) Lentiviral Particles: sc-154402-V.

Molecular Weight of ANO4: 111 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](http://www.scbt.com) or our catalog for detailed protocols and support products.