

# ANO10 (C-14): sc-103276

## BACKGROUND

ANO10 (anoctamin 10), also known as TMEM16K (transmembrane protein 16K) or SCAR10, is a 660 amino acid multi-pass membrane protein that has expression in brain, moderate expression in heart and retina and low expression in spleen, liver, kidney, lung, testis and placenta. Defects in the gene encoding ANO10 are the cause of Spinocerebellar ataxia, autosomal recessive 10 (SCAR 10), which is a disease characterized by limb and gait ataxia, dysarthria and nystagmus. ANO10 is also known to inhibit the activity of ANO1, a fellow anoctamin family member. ANO10 is encoded by a gene that maps to chromosome 3 and is expressed as five isoforms due to alternative splicing events. Chromosome 3 is made up of about 214 million bases encoding over 1,100 genes. Notably, there is a chemokine receptor (CKR) gene cluster and a variety of human cancer-related loci on chromosome 3. Particular regions of the chromosome 3 short arm are deleted in many types of cancer cells. Key tumor suppressing genes on chromosome 3 encode apoptosis mediator RASSF1, cell migration regulator HYAL1 and angiogenesis suppressor SEMA3B. Marfan Syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth Disease are a few of the numerous genetic diseases associated with chromosome 3.

## REFERENCES

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4. Muzny, D.M., et al. 2006. The DNA sequence, annotation and analysis of human chromosome 3. *Nature* 440: 1194-1198.
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## CHROMOSOMAL LOCATION

Genetic locus: ANO10 (human) mapping to 3p22.1.

## SOURCE

ANO10 (C-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of ANO10 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-103276 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ANO10 (C-14) is recommended for detection of ANO10 of 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.

Suitable for use as control antibody for ANO10 siRNA (h): sc-78203, ANO10 shRNA Plasmid (h): sc-78203-SH and ANO10 shRNA (h) Lentiviral Particles: sc-78203-V.

Molecular Weight of ANO10: 76 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) 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.

## 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.