

### Anti-ANO1 / TMEM16A Reference Antibody (Novartis patent anti-TMEM16A )

Recombinant Antibody Catalog # APR10785

### Specification

# Anti-ANO1 / TMEM16A Reference Antibody (Novartis patent anti-TMEM16A ) - Product Information

Application Primary Accession Reactivity Clonality Isotype Calculated MW FC, E, FTA <u>05XXA6</u> Human Monoclonal IgG1 150 KDa

## Anti-ANO1 / TMEM16A Reference Antibody (Novartis patent anti-TMEM16A ) - Additional Information

Target/Specificity ANO1 / TMEM16A

**Endotoxin** < 0.001EU/ μg,determined by LAL method.

Conjugation Unconjugated

Expression system CHO Cell

Format

Purified monoclonal antibody supplied in PBS, pH6.0, without preservative. This antibody is purified through a protein A column.

## Anti-ANO1 / TMEM16A Reference Antibody (Novartis patent anti-TMEM16A ) - Protein Information

Name ANO1

Function

Calcium-activated chloride channel (CaCC) (PubMed:<a

href="http://www.uniprot.org/citations/20056604" target="\_blank">20056604</a>, PubMed:<a href="http://www.uniprot.org/citations/22178883" target="\_blank">22178883</a>, PubMed:<a href="http://www.uniprot.org/citations/22946059" target="\_blank">22946059</a>, PubMed:<a href="http://www.uniprot.org/citations/22946059" target="\_blank">22946059</a>, PubMed:<a href="http://www.uniprot.org/citations/32487539" target="\_blank">32487539</a>). Plays a role in transepithelial anion transport and smooth muscle contraction. Required for the normal functioning of the interstitial cells of Cajal (ICCs) which generate electrical pacemaker activity in gastrointestinal smooth muscles. Acts as a major contributor to basal and stimulated chloride conductance in airway epithelial cells and plays an important role in tracheal cartilage



development. Required for CFTR activation by enhancing endoplasmic reticulum Ca(2+) store release and is also required for CFTR membrane expression (PubMed:<a

href="http://www.uniprot.org/citations/28963502" target=" blank">28963502</a>). Required for basal and ATP-dependent mucus secretion in airways and intestine, probably by controlling exocytosis of mucus-filled granules by providing Ca(2+) to an apical signaling compartment (By similarity). Contributes to airway mucus expression induced by interleukins IL3 and IL8 and by the asthma-associated protein CLCA1 and is required for expression of mucin MUC5AC (PubMed:<a href="http://www.uniprot.org/citations/33026825" target=" blank">33026825</a>). However, was shown in another study not to be required for MUC5AC expression (PubMed: <a href="http://www.uniprot.org/citations/31732694" target="\_blank">31732694</a>). Plays a role in the propagation of Ca(2+) waves in Kolliker's organ in the cochlea and contributes to the refinement of auditory brainstem circuitries prior to hearing onset (By similarity). In vomeronasal sensory neurons, modulates spontaneous firing patterns in the absence of stimuli as well as the firing pattern of pheromone- evoked activity (By similarity). Responsible for calcium-activated chloride channel activity in type I taste cells of the vallate papillae (By similarity). Acts as a heat sensor in nociceptive neurons (By similarity). In dorsal root ganglion neurons, plays a role in mediating non-histaminergic Mas-related G-protein coupled receptor (MRGPR)- dependent itching, acting as a downstream effector of MRGPRs (By similarity). In the developing brain, required for the Ca(2+)-dependent process extension of radial glial cells (By similarity).

#### **Cellular Location**

Apical cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q8BHY3}. Presynapse {ECO:0000250|UniProtKB:Q8BHY3}. Note=In differentiating airway epithelial cells, predominantly intracellular at day 0 but is apically localized by day 30. Expressed in the presynapse of retinal neurons (By similarity). {ECO:0000250|UniProtKB:Q8BHY3}

#### **Tissue Location**

Expressed in nasal epithelial cells (at protein level) (PubMed:32487539). In the kidney, expressed in the collecting duct (at protein level) (PubMed:24913262). Broadly expressed with higher levels in liver, skeletal muscle and gastrointestinal muscles (PubMed:15215166, PubMed:16906560). Expressed in eccrine sweat glands (PubMed:25220078).

#### Anti-ANO1 / TMEM16A Reference Antibody (Novartis patent anti-TMEM16A ) - Protocols

Provided below are standard protocols that you may find useful for product applications.

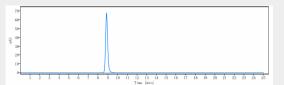
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-ANO1 / TMEM16A Reference Antibody (Novartis patent anti-TMEM16A ) - Images



| <u>kDa</u> | NR | М | R |
|------------|----|---|---|
| 185        | _  | - |   |
| 115        |    | _ |   |
| 80         |    | - |   |
| 65         |    | - |   |
| 50         |    | - | - |
| 30         |    | _ |   |
| 25         |    | - | - |
| 15         |    | _ |   |
| 10         |    |   |   |

Anti-ANO1 / TMEM16A Reference Antibody (Novartis patent anti-TMEM16A ) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%



The purity of Anti-ANO1 / TMEM16A Reference Antibody (Novartis patent anti-TMEM16A )is more than 95% ,determined by SEC-HPLC.