

## Basic Information

Product Name	Anti-TMEM16A/DOG1/ANO1 Antibody	
Gene Name	ANO1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human	
Tested Application	WB, IHC, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human TMEM16A, which shares 83.8% amino acid (aa) sequence identity with both mouse and rat TMEM16A.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	130 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Flow Cytometry (Fixed): 1:50-200 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

12 months from date of receipt, -20°C as supplied.

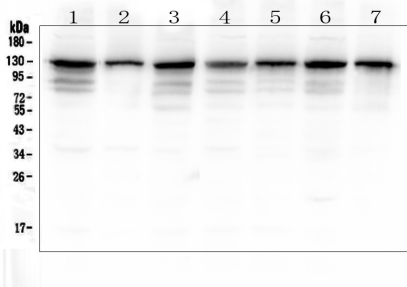
## Background Information

Anoctamin-1 (ANO1), also known as oral cancer overexpressed 2 (ORAOV2) or tumor-amplified and overexpressed sequence 2(TMEM16A), is a protein that in humans is encoded by the ANO1 gene. This gene belongs to a family of membrane proteins containing 8 transmembrane segments, and it is mapped to 11q13.3. ANO1 is a candidate calcium-activated chloride channel that mediates receptor-activated chloride currents in diverse physiologic processes, and it is thought to be responsible for a voltage-sensitive calcium-activated chloride current. Its overexpression was reported in esophageal squamous cell carcinoma and breast cancer progression Crofelemer, an antidiarrhoeal, inhibits this channel. ANO1 has eight transmembrane domains, its pore is large and non-selective, allowing other negatively charged species to permeate.

## Reference

Anti-TMEM16A/DOG1/ANO1 Antibody被引用在1文献中。

## Selected Validation Data



Western blot analysis of TMEM16A/DOG1/ANO1 using anti-TMEM16A/DOG1/ANO1 antibody (A00713). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,

Lane 2: human HepG2 whole cell lysates,

Lane 3: human A549 whole cell lysates,

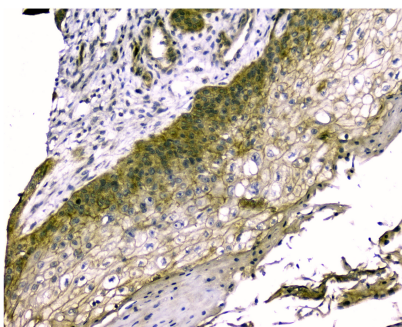
Lane 4: human PANC-1 whole cell lysates,

Lane 5: human SK-OV-3 whole cell lysates,

Lane 6: human SGC-7901 whole cell lysates,

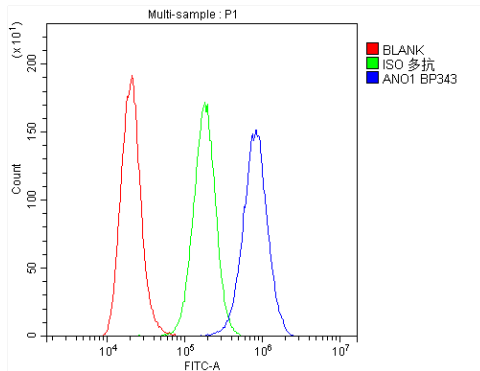
Lane 7: human COLO-320 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-TMEM16A/DOG1/ANO1 antigen affinity purified polyclonal antibody (A00713) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for TMEM16A/DOG1/ANO1 at approximately 130 kDa. The expected band size for TMEM16A/DOG1/ANO1 is at 114 kDa.



IHC analysis of TMEM16A/DOG1/ANO1 using anti-TMEM16A/DOG1/ANO1 antibody (A00713).

TMEM16A/DOG1/ANO1 was detected in a paraffin-embedded section of human oesophagus squama cancer tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-TMEM16A/DOG1/ANO1 Antibody (A00713) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



Flow Cytometry analysis of A431 cells using anti-TMEM16A/DOG1/ANO1 antibody (A00713).

Overlay histogram showing A431 cells stained with A00713 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-TMEM16A/DOG1/ANO1 Antibody (A00713) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.