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# Anti-CNGA2 Antibody

Catalog # AP51097

## Product Information

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|---|---|
| **Application** | WB, IHC, IF/IC |
| **Primary Accession** | Q16280 |
| **Reactivity** | Human, Mouse, Rat |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 76048 |

## Additional Information

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|---|---|
| **Gene ID** | 1260 |
| **Other Names** | CNCA; CNCA1; CNCG2; Cyclic nucleotide-gated olfactory channel; Cyclic nucleotide-gated cation channel 2; Cyclic nucleotide-gated channel alpha-2; CNG channel alpha-2; CNG-2; CNG2 |
| **Target/Specificity** | KLH-conjugated synthetic peptide encompassing a sequence within the center region of human CNGA2. The exact sequence is proprietary. |
| **Dilution** | WB~~ 1:1000 IHC~~1:100~500 IF/IC~~N/A |
| **Format** | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide. |
| **Storage** | Store at -20 °C.Stable for 12 months from date of receipt |

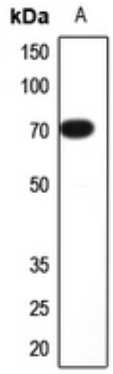
## Protein Information

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|---|---|
| **Name** | CNGA2 {ECO:0000303\|PubMed:11764791, ECO:0000312\|HGNC:HGNC:2149} |
| **Function** | Pore-forming subunit of the olfactory cyclic nucleotide-gated channel. Operates in the cilia of olfactory sensory neurons where chemical stimulation of the odorant is converted to an electrical signal. Mediates odorant-induced cAMP-dependent Ca(2+) influx triggering neuron depolarization. The rise of intracellular Ca(2+) levels potentiates the olfactory response by activating Ca(2+)- dependent Cl(-) channels, but it also serves as a negative feedback signal to desensitize the channel for rapid adaptation to odorants. Conducts cAMP- and cGMP-gated ion currents, with permeability for monovalent and divalent cations. Also expressed in a subpopulation of sensory neurons of the main olfactory epithelium (type B cells), where it mediates Ca(2+) influx in response to hydrogen sulfide, and is required for defensive behavioral responses to this stimulus (By similarity). |
| **Cellular Location** | Cell projection, cilium membrane {ECO:0000250\|UniProtKB:Q00195}; |

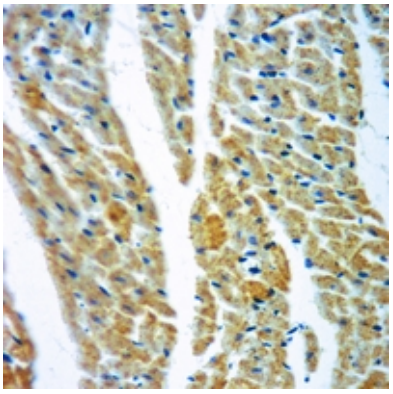
## References

Distler M.,et al.Neuropharmacology 33:1275-1282(1994).
Sjoeblom T.,et al.Science 314:268-274(2006).

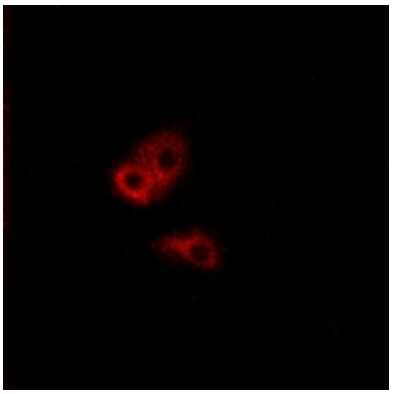
## Images




Western blot analysis of CNGA2 expression in H446 (A) whole cell lysates. (Predicted band size: 76 kD; Observed band size: 76 kD)



Immunohistochemical analysis of CNGA2 staining in rat heart formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of CNGA2 staining in A549 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.