

 Rudolf-Wissell-Str. 28

 37079 Göttingen, Germany

 Phone:
 +49 551-50556-0

 Fax:
 +49 551-50556-384

 E-mail:
 sales@sysy.com

 Web:
 www.sysy.com

CNGA3

Cat.No. 267 003; Polyclonal rabbit antibody, 50 µg specific antibody (lyophilized)

Data Sheet

Reconstitution/ Storage	50 μ g specific antibody, lyophilized. Affinity purified with the immunogen. Rabbit serum albumin was added for stabilization. For reconstitution add 50 μ l H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	WB: not tested yet IP: not tested yet ICC: not tested yet IHC: 1 : 5000 IHC-P/FFPE: not tested yet
Immunogen	Synthetic peptide corresponding to AA 653 to 670 from rat CNGA3 (UniProt Id: Q9ER33)
Reactivity	Reacts with: rat (Q9ER33), mouse (Q922J3). Other species not tested yet.
Specificity	Specific for CNGA3.

TO BE USED IN VITRO / FOR RESEARCH ONLY NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

In the mammalian retina two types of photoreceptors, rods and cones, occur. Their response to light is mediated by the closure of a **c**yclic **n**ucleotide-**g**ated (CNG) cation channel in the plasma membrane, causing hyperpolarization and a decrease of glutamate release.

In rods the CNG channel is formed by the subunits CNGA1 and CNGB1 and in cones by **CNGA3** and CNGB3. Accordingly CNGA3 knockout mice lack any cone-mediated photoresponse.

This antibody is a useful marker for photoreceptors.

Selected General References

Synaptic plasticity in CNGA3(-/-) mice: cone bipolar cells react on the missing cone input and form ectopic synapses with rods. Haverkamp S, Michalakis S, Claes E, Seeliger MW, Humphries P, Biel M, Feigenspan A The Journal of neuroscience : the official journal of the Society for Neuroscience (2006) 26(19): 5248-55.

Morphological characterization of the retina of the CNGA3(-/-)Rho(-/-) mutant mouse lacking functional cones and rods. Claes E, Seeliger M, Michalakis S, Biel M, Humphries P, Haverkamp S Investigative ophthalmology & visual science (2004) 45(6): 2039-48.

Selective loss of cone function in mice lacking the cyclic nucleotide-gated channel CNG3. Biel M, Seeliger M, Pfeifer A, Kohler K, Gerstner A, Ludwig A, Jaissle G, Fauser S, Zrenner E, Hofmann F Proceedings of the National Academy of Sciences of the United States of America (1999) 96(13): 7553-7.