

Product name:	CNG-1 Rabbit Polyclonal Antibody
Cat number:	ABN09115
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human CNGA1. AA range:401-450
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,ELISA 1:20000-1:40000
Molecular Weight:	80kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

The protein encoded by this gene is involved in phototransduction. Along with another protein, the encoded protein forms a cGMP-gated cation channel in the plasma membrane, allowing depolarization of rod photoreceptors. This represents the last step in the phototransduction pathway. Defects in this gene are a cause of retinitis pigmentosa autosomal recessive (ARRP) disease. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2008],caution:It is uncertain whether Met-1 or Met-5 is the initiator.,disease:Defects in CNGA1 are a cause of retinitis pigmentosa autosomal recessive (ARRP) [MIM:268000]. RP leads to degeneration of retinal photoreceptor cells. Patients typically have night vision blindness and loss of midperipheral visual field. As their condition progresses, they lose their far peripheral visual field and eventually central vision as well.,function:Visual signal transduction is mediated by a G-protein coupled cascade using cGMP as second messenger. This protein can be activated by cyclic GMP which leads to an opening of the cation channel and thereby causing a depolarization of rod photoreceptors.,online information:Retina International's Scientific Newsletter,similarity:Belongs to the cyclic nucleotide-gated cation channel (TC 1.A.1.5) family.,similarity:Contains 1 cyclic nucleotide-binding domain.,subunit:Homotetramer or higher oligomer. Forms heterooligomeric complex with CNG4.,tissue specificity:Rod cells in the retina.,