

Summary

Production Name	CNG-1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human, Mouse, Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	CNGA1
Alternative Names	CNGA1; CNCG; CNCG1; cGMP-gated cation channel alpha-1; Cyclic nucleotide-gated
	cation channel 1; Cyclic nucleotide-gated channel alpha-1; CNG channel alpha-1; CNG-
	1; CNG1; Cyclic nucleotide-gated channel; photoreceptor; Rod photoreceptor cG
Gene ID	1259.0
SwissProt ID	P29973.The antiserum was produced against synthesized peptide derived from human
	CNGA1. AA range:401-450

Application

Dilution Ratio	WB 1:500 - 1:2000. ELISA: 1:40000. Not yet tested in other applications.
Molecular Weight	80kD



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.,

Research Area

Image Data



Western blot analysis of CNGA1 Antibody. The lane on the right is blocked with the CNGA1 peptide.

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Western blot analysis of the lysates from HepG2 cells using CNGA1 antibody.





Note

For research use only.