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GUCY2D Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11569c

Specification

GUCY2D Antibody (Center) - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	Q02846
Other Accession	NP_000171.1
Reactivity	**Human, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**120059**
Antigen Region	**540-570**

GUCY2D Antibody (Center) - Additional Information

Gene ID 3000

Other Names
Retinal guanylyl cyclase 1, RETGC-1, Guanylate cyclase 2D, retinal, Rod outer segment membrane guanylate cyclase, ROS-GC, GUCY2D, CORD6, GUC1A4, GUC2D, RETGC, RETGC1

Target/Specificity
This GUCY2D antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 540-570 amino acids from the Central region of human GUCY2D.

Dilution
WB~~1:2000
IHC-P~~1:50~100
FC~~1:25

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
GUCY2D Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

GUCY2D Antibody (Center) - Protein Information

Name GUCY2D

Function Catalyzes the synthesis of cyclic GMP (cGMP) in rods and cones of photoreceptors. Plays an essential role in phototransduction, by mediating cGMP replenishment (PubMed:21928830, PubMed:30319355, PubMed:26100624, PubMed:9600905, PubMed:15123990). May also participate in the trafficking of membrane-asociated proteins to the photoreceptor outer segment membrane (By similarity).

Cellular Location
Photoreceptor outer segment membrane; Single-pass type I membrane protein. Endoplasmic reticulum membrane; Single-pass type I membrane protein

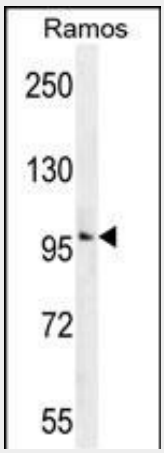
Tissue Location
Retina..

GUCY2D Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

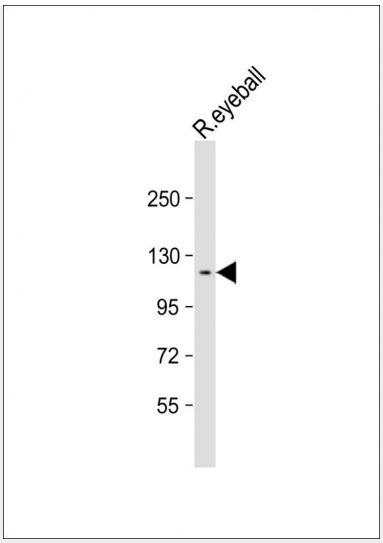
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

GUCY2D Antibody (Center) - Images

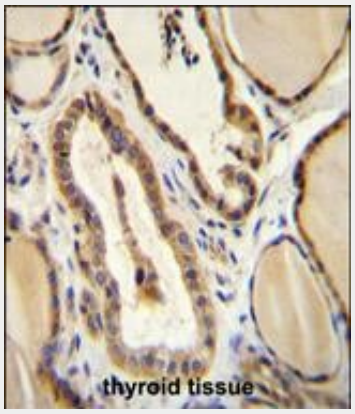


GUCY2D Antibody (Center) (Cat. #AP11569c) western blot analysis in Ramos cell line lysates (35ug/lane).This demonstrates the GUCY2D antibody detected the GUCY2D protein (arrow).

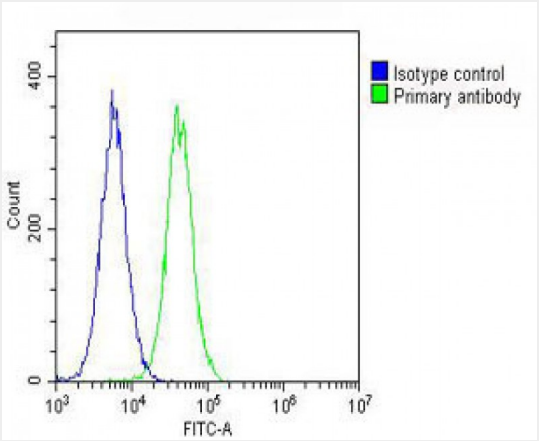
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Anti-GUCY2D Antibody (Center) at 1:2000 dilution + rat eyeball lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 120 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



GUCY2D Antibody (Center) (Cat. #AP11569c)immunohistochemistry analysis in formalin fixed and paraffin embedded human thyroid tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of GUCY2D Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



Overlay histogram showing Hela cells stained with AP11569c (green line). The cells were fixed with 2% paraformaldehyde (10 min). The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP11569c, 1:25 dilution)

for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OH191631) at 1/200 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was rabbit IgG (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

GUCY2D Antibody (Center) - Background

This gene encodes a retina-specific guanylate cyclase, which is a member of the membrane guanylyl cyclase family. Like other membrane guanylyl cyclases, this enzyme has a hydrophobic amino-terminal signal sequence followed by a large extracellular domain, a single membrane spanning domain, a kinase homology domain, and a guanylyl cyclase catalytic domain. In contrast to other membrane guanylyl cyclases, this enzyme is not activated by natriuretic peptides. Mutations in this gene result in Leber congenital amaurosis and cone-rod dystrophy-6 diseases. [provided by RefSeq].

GUCY2D Antibody (Center) - References

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Liu, C.Y., et al. Carcinogenesis 31(7):1259-1263(2010)
Joslyn, G., et al. Alcohol. Clin. Exp. Res. 34(5):800-812(2010)
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