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PRPH2 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54422

Specification

PRPH2 Polyclonal Antibody - Product Information

Application	**WB, IHC-P, IHC-F, IF, ICC, E**
Primary Accession	P23942
Reactivity	**Rat, Dog, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**39 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from human PRPH2**
Epitope Specificity	**131-230/346**
Isotype	**IgG**
Purity	
affinity purified by Protein A	
Buffer	**0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.**
SUBCELLULAR LOCATION	**Membrane; Multi-pass membrane protein.**
SIMILARITY	**Belongs to the PRPH2/ROM1 family.**
SUBUNIT	**Homodimer; disulfide-linked. Probably forms a complex with a ROM1 homodimer. Other proteins could associate with this complex in rods. Interacts with MREG.**
DISEASE	**Defects in PRPH2 are the cause of retinitis pigmentosa type 7 (RP7). 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. Defects in PRPH2 are a cause of retinitis punctata albescens. Defects in PRPH2 are a cause of adult-onset vitelliform macular dystrophy (AVMD). AVMD is a rare autosomal dominant disorder with incomplete penetrance and highly variable expression. Patients usually become symptomatic in the fourth or fifth decade of life with a protracted disease of decreased visual acuity. Defects in PRPH2 are a cause of patterned dystrophy of retinal pigment epithelium (PDREP). Patterned dystrophies of the retinal pigment epithelium (RPE) refer to a heterogeneous group of macular disorders. Three main types of PDREP have**

been described: reticular (fishnet-like) dystrophy, macroreticular (spider-shaped) dystrophy and butterfly-shaped pigment dystrophy. Defects in PRPH2 are a cause of choroidal dystrophy central areolar type 2 (CACD2). It is a disorder which affects the posterior pole of the eye, and early lesions consist of a non-specific area of granular hyperpigmentation at the fovea. The characteristic sign of the disorder, a zone of atrophy that develops in the macula of the eye and involves the retinal pigment epithelium and the choriocapillaris, occurs several decades after onset.

Important Note

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions
May function as an adhesion molecule involved in stabilization and compaction of outer segment disks or in the maintenance of the curvature of the rim. It is essential for disk morphogenesis.

PRPH2 Polyclonal Antibody - Additional Information

Gene ID 5961

Other Names
Peripherin-2, Retinal degeneration slow protein, Tetraspanin-22, Tspan-22, PRPH2, PRPH, RDS, TSPAN22

Target/Specificity
Retina (photoreceptor). In rim region of ROS (rod outer segment) disks.

Dilution
WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Storage
Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ℃.

PRPH2 Polyclonal Antibody - Protein Information

Name PRPH2

Synonyms PRPH, RDS, TSPAN22

Function
Essential for retina photoreceptor outer segment disk morphogenesis, may also play a role with ROM1 in the maintenance of outer segment disk structure (By similarity). Required for the maintenance of retinal outer nuclear layer thickness (By similarity). Required for the correct

development and organization of the photoreceptor inner segment (By similarity).

Cellular Location
Membrane {ECO:0000250|UniProtKB:P17810}; Multi- pass membrane protein. Cell projection, cilium, photoreceptor outer segment {ECO:0000250|UniProtKB:P15499} Photoreceptor inner segment {ECO:0000250|UniProtKB:P15499}

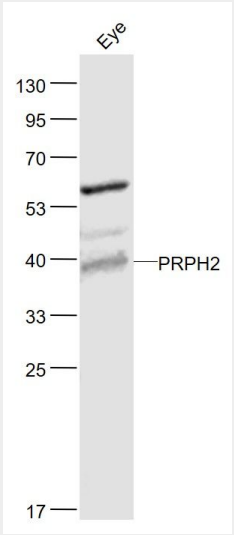
Tissue Location
Retina (photoreceptor). In rim region of ROS (rod outer segment) disks

PRPH2 Polyclonal Antibody - 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

PRPH2 Polyclonal Antibody - Images



Sample:
Eye (Mouse) Lysate at 40 ug
Primary: Anti- PRPH2 (bs-11197R) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 39 kD
Observed band size: 39 kD