10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CTRP5 Rabbit pAb

CTRP5 Rabbit pAb
Catalog # AP54606

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9BXJ0
Reactivity	Mouse
Predicted	Rat, Pig, Dog, Human, Rabbit
Host	Rabbit
Clonality	Polyclonal
Calculated MW	25298
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CTRP5
Epitope Specificity	191-243/243
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	Secreted
DISEASE	Defects in C1QTNF5 are a cause of late-onset retinal degeneration (LORD) [MIM:605670]. LORD is an autosomal dominant disorder characterized by onset in the fifth to sixth decade with night blindness and punctate yellow-white deposits in the retinal fundus, progressing to severe central and peripheral degeneration, with choroidal neovascularization and chorioretinal atrophy.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Members of the C1q superfamily have diverse functions that are related to cell adhesion and basement membrane components. CTRP5 (Complement C1q tumor necrosis factor-related protein 5) is a 243 amino acid secreted and membrane-associated protein that contains a collagen-like domain and a C1q domain. CTRP5 is a short-chain collagen that is expressed in retinal pigment epithelium as well as brain, lung, liver and placenta. By forming an extracellular hexagonal lattice, CTRP5 facilitates the adhesion of basal retinal pigment epithelium to Bruch's membrane, the innermost layer of the choroid. A mutation within the C1q domain of CTRP5 results in abnormal high molecular weight aggregate formation, which alters its structure and interactions. This mutation may result in the presentation of late-onset retinal degeneration (LORD), an autosomal dominant disorder that is characterized by punctate yellow-white deposits in the retinal fundus and night blindness.

Additional Information

Gene ID	114902
Other Names	Complement C1q tumor necrosis factor-related protein 5, C1QTNF5, CTRP5

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C 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 °C.

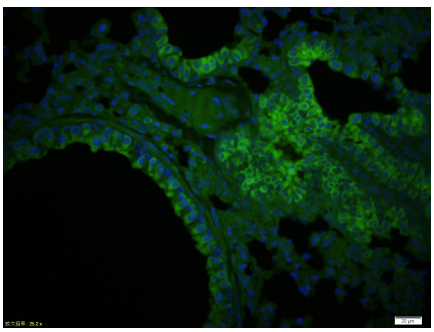
Protein Information

Name	C1QTNF5 {ECO:0000303|PubMed:22892318, ECO:0000312|HGNC:HGNC:14344}
Function	Involved in cellular energy homeostasis through the regulation of 5'-AMP-activated protein kinase (AMPK) phosphorylation and activation (PubMed:19651784, PubMed:34887495). In myocytes, it induces adiponectin receptors-independent AMPK phosphorylation and activation, thereby increasing the phosphorylation of acetyl-CoA carboxylase (ACC) and stimulating fatty acid oxidation and glucose uptake (PubMed:19651784). In the retinal pigment epithelium (RPE), it acts as antagonist of adiponectin receptor protein 1 (ADIPOR1) and negatively regulates ADIPOR1-dependent AMPK activation (PubMed:34887495).
Cellular Location	Apical cell membrane. Secreted. Note=Associated with the lateral and apical membranes of the ocular ciliary body and retinal pigment epithelium (RPE).

Background

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

Images



Paraformaldehyde-fixed, paraffin embedded (Mouse lung); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CTRP5) Polyclonal Antibody, Unconjugated (AP54606) at 1:200 overnight at 4°C, followed by a conjugated Goat Anti-Rabbit IgG antibody (AP54606-FITC) for 90 minutes, and DAPI for nuclei staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.