



# MYOC Monoclonal Antibody

<b>Catalog No</b>	YP-mAb-06845
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse
<b>Applications</b>	WB
<b>Gene Name</b>	MYOC GLC1A TIGR
<b>Protein Name</b>	Myocilin (Trabecular meshwork-induced glucocorticoid response protein)
<b>Immunogen</b>	Synthesized peptide derived from part region of human protein
<b>Specificity</b>	MYOC Monoclonal Antibody detects endogenous levels of protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
<b>Source</b>	Monoclonal, Mouse,IgG
<b>Purification</b>	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB 1:500-1:2000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	
<b>Observed Band</b>	55kD
<b>Cell Pathway</b>	Secreted . Golgi apparatus . Cytoplasmic vesicle . Secreted, extracellular space. Secreted, extracellular space, extracellular matrix . Secreted, extracellular exosome . Mitochondrion . Mitochondrion intermembrane space . Mitochondrion inner membrane . Mitochondrion outer membrane . Rough endoplasmic reticulum . Cell projection. Cell projection, cilium . Located preferentially in the ciliary rootlet and basal body of the connecting cilium of photoreceptor cells, and in the rough endoplasmic reticulum (PubMed:9169133). It is only imported to mitochondria in the trabecular meshwork (PubMed:17516541). Localizes to the Golgi apparatus in Schlemm's canal endothelial cells (PubMed:11053284). Appears in the extracellular space of trabecular meshwork cells by an unconventional mechanism, likely as
<b>Tissue Specificity</b>	Detected in aqueous humor (PubMed:12697062). Detected in the eye (at protein level) (PubMed:11431441). Widely expressed. Highly expressed in various types of muscle, ciliary body, papillary sphincter, skeletal muscle, heart, and bone marrow-derived mesenchymal stem cells. Expressed predominantly in the retina. In normal eyes, found in the inner uveal meshwork region and the anterior portion of the meshwork. In contrast, in many glaucomatous eyes, it is found in more regions of the meshwork and seems to be expressed at higher levels than in normal eyes, regardless of the type or clinical severity of glaucoma. The myocilin 35 kDa fragment is detected in aqueous humor and to a lesser extent in iris and



ciliary body.

#### Function

disease:Defects in MYOC are the cause of primary open angle glaucoma type 1A (GLC1A) [MIM:137750]. Primary open angle glaucoma (POAG) is characterized by a specific pattern of optic nerve and visual field defects. The angle of the anterior chamber of the eye is open, and usually the intraocular pressure is increased. The disease is asymptomatic until the late stages, by which time significant and irreversible optic nerve damage has already taken place.,disease:Defects in MYOC may also contribute to primary congenital glaucoma type 3A (GLC3A) [MIM:231300]. Defects in MYOC may contribute to this phenotype via digenic inheritance. GLC3A is an autosomal recessive form of primary congenital glaucoma (PCG). PCG is characterized by marked increase of intraocular pressure at birth or early childhood, large ocular globes (buphthalmos) and corneal edema. It results from developmental defects of th

#### Background

MYOC encodes the protein myocilin, which is believed to have a role in cytoskeletal function. MYOC is expressed in many ocular tissues, including the trabecular meshwork, and was revealed to be the trabecular meshwork glucocorticoid-inducible response protein (TIGR). The trabecular meshwork is a specialized eye tissue essential in regulating intraocular pressure, and mutations in MYOC have been identified as the cause of hereditary juvenile-onset open-angle glaucoma. [provided by RefSeq, Jul 2008],

#### matters needing attention

Avoid repeated freezing and thawing!

#### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

### Products Images