

Rabbit MYOC Polyclonal Antibody | anti-MYOC antibody

MYOC Antibody

CATALOG # AAA326251	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS ELISA, Immunohistochemistry, Western Blot
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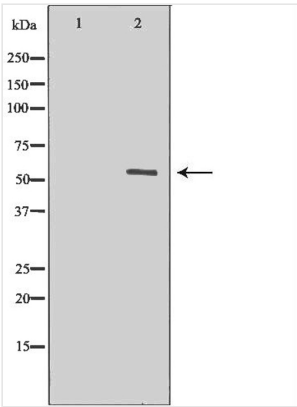
PRODUCT SYNONYMS

MYOC; Polyclonal Antibody; MYOC Antibody; GLC1A; GPOA; JOAG; JOAG1; Mutated trabecular meshwork-induced glucocorticoid response protein; MYOC_HUMAN; Myocilin; trabecular meshwork inducible glucocorticoid; TIGR; Trabecular meshwork induced glucocorticoid response protein; Trabecular meshwork-induced glucocorticoid response protein; anti-MYOC antibody

PRODUCT SPECIFICATIONS

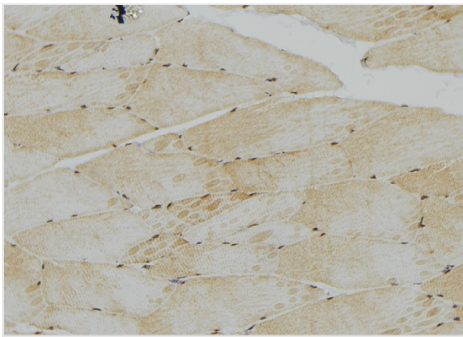
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	MYOC antibody detects endogenous levels of total MYOC
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	504
Applicable Applications for anti-MYOC antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human MYOC
Subcellular Location	Rough Endoplasmic Reticulum. Secreted. 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. Also secreted.
Tissue Specificity	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.
Predicted Cross Reactivity	Zebrafish, Bovine, Horse, Sheep, Rabbit, Dog, Xenopus
Similarity	Zebrafish (92%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (92%), Dog (100%), Xenopus (92%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)

Western blot analysis of extracts of human heart tissue, using MYOC antibody. The lane on the left is treated with the antigen-specific peptide.



IHC (Immunohistochemistry)

AAA326251 at 1/100 staining Mouse muscle tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-MYOC antibody

Description: Myocilin (MYOC), also known as TIGR or GLC1A, is a secreted glycoprotein of the olfactomedin family, originally identified in trabecular meshwork cells after prolonged treatment with glucocorticoids, and, independently, in the retina (PMID: 9176893; 9169133). It may participate in the obstruction of fluid outflow in the trabecular meshwork. Defects in MYOC are the cause of primary open angle glaucoma (POAG) (PMID: 21709622). MYOC has a molecular weight of 55-57 kDa, besides, a 66-kDa form, which could be a result of post-translational modifications, has also been reported in some researches (PMID: 9497363; 12150989).

Function: Secreted glycoprotein regulating the activation of different signaling pathways in adjacent cells to control different processes including cell adhesion, cell-matrix adhesion, cytoskeleton organization and cell migration. Promotes substrate adhesion, spreading and formation of focal contacts. Negatively regulates cell-matrix adhesion and stress fiber assembly through Rho protein signal transduction. Modulates the organization of actin cytoskeleton by stimulating the formation of stress fibers through interactions with components of Wnt signaling pathways. Promotes cell migration through activation of PTK2 and the downstream phosphatidylinositol 3-kinase signaling. Plays a role in bone formation and promotes osteoblast differentiation in a dose-dependent manner through mitogen-activated protein kinase signaling. Mediates myelination in the peripheral nervous system through ERBB2/ERBB3 signaling. Plays a role as a regulator of muscle hypertrophy through the components of dystrophin-associated protein complex. Involved in positive regulation of mitochondrial depolarization. Plays a role in neurite outgrowth. May participate in the obstruction of fluid outflow in the trabecular meshwork.

Subunit Structure: Homodimer (via N-terminus). Can also form higher oligomers (PubMed:9497363). Interacts with OLFM3, FN1, NRCAM, GLDN and NFASC (PubMed:12019210, PubMed:11773026, PubMed:23897819). Interacts (via N-terminus) with MYL2 (PubMed:11773029). Interacts with SFRP1, FRZB, FZD7, FZD10, FZD1 and WIF1; regulates Wnt signaling (PubMed:19188438). Interacts with SNTA1; regulates muscle hypertrophy. Interacts with ERBB2 and ERBB3; activates ERBB2-ERBB3 signaling pathway. Interacts with SNCG; affects its secretion and its aggregation (By similarity).

Post-translational Modifications: Different isoforms may arise by post-translational modifications. Glycosylated. Palmitoylated. Undergoes a calcium-dependent proteolytic cleavage at Arg-226 by CAPN2 in the endoplasmic reticulum. The result is the production of two fragments, one of 35 kDa containing the C-terminal olfactomedin-like domain, and another of 20 kDa containing the N-terminal leucine zipper-like domain.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4557779
NCBI GeneID	4653
NCBI Accession #	NP_000252.1
NCBI GenBank Nucleotide #	NM_000261.1
UniProt Accession #	Q99972; O00620; Q7Z6Q9; B2RD84
Molecular Weight	Observed: 57 kDa Predicted: 57 kDa

NCBI Official Full Name	myocilin
NCBI Official Synonym Full Names	myocilin
NCBI Official Symbol	MYOC
NCBI Official Synonym Symbols	GPOA; JOAG; TIGR; GLC1A; JOAG1
NCBI Protein Information	myocilin
UniProt Protein Name	Myocilin
UniProt Gene Name	MYOC
UniProt Synonym Gene Names	GLC1A; TIGR1 PublicationManual assertion based on opinion iniRef.1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/myoc-antibody-immunohistochemistry-western-blot-elisa/326251>