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MYOC / Myocilin Antibody (clone 4F8)

Mouse Monoclonal Antibody
Catalog # ALS13364

Specification

MYOC / Myocilin Antibody (clone 4F8) - Product Information

Application	**WB, IHC-P, E, RNAi**
Primary Accession	Q99972
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Calculated MW	**57kDa KDa**
Dilution	**WB~~1:1000** **IHC-P~~N/A** **E~~N/A** **RNAi~~N/A**

MYOC / Myocilin Antibody (clone 4F8) - Additional Information

Gene ID 4653

Other Names
Myocilin, Myocilin 55 kDa subunit, Trabecular meshwork-induced glucocorticoid response protein, Myocilin, N-terminal fragment, Myocilin 20 kDa N-terminal fragment, Myocilin, C-terminal fragment, Myocilin 35 kDa N-terminal fragment, MYOC, GLC1A, TIGR

Reconstitution & Storage
Store at -20°C. Aliquot to avoid freeze/thaw cycles.

Precautions
MYOC / Myocilin Antibody (clone 4F8) is for research use only and not for use in diagnostic or therapeutic procedures.

MYOC / Myocilin Antibody (clone 4F8) - Protein Information

Name MYOC

Synonyms GLC1A, TIGR {ECO:0000303|PubMed:9280311}

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.

Cellular Location
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. Note=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 associated with exosome-like vesicles (PubMed:15944158). Localizes in trabecular meshwork extracellular matrix (PubMed:15944158). [Myocilin, N-terminal fragment]: Endoplasmic reticulum. Note=Remains retained in the endoplasmic reticulum

Tissue Location
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

MYOC / Myocilin Antibody (clone 4F8) - 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

MYOC / Myocilin Antibody (clone 4F8) - Images

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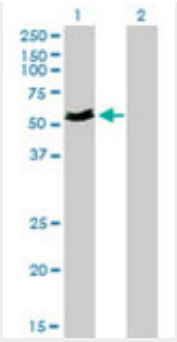

Western blot of MYOC expression in transfected 293T cell line by MYOC monoclonal antibody clone 4F8.

MYOC / Myocilin Antibody (clone 4F8) - Background

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MYOC / Myocilin Antibody (clone 4F8) - References

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Kubota R.,et al.Biochem. Biophys. Res. Commun. 242:396-400(1998).