myocilin (H-130): sc-20976

**BACKGROUND**
Myocilin is an extracellular protein expressed in the eye, including the retina, trabecular meshwork and ciliary body. Myocilin can form homomultimers in vivo and can also associate with components of the ECM via interactions with the Hep II domain of Fibronectin. In addition, myocilin interacts with myosin regulatory light chain, a component of the myosin motor protein complex. This interaction implies a role for myocilin in the actomyosin system, linking myocilin to the functional status of the trabecular meshwork, which is responsible for controlling the intraocular pressure (IOP). Alterations in functions of the TM may lead to IOP elevation and development of glaucoma, a major cause of blindness. Myocilin is encoded by MYOC (also designated TIGR), a gene that maps to the GLC1A locus on chromosome 1q24.3 and is susceptible to mutations. Mutations in the MYOC gene are specifically linked with primary open angle glaucoma (POAG), a blinding disease characterized by progressive loss of retinal ganglion cells.

**CHROMOSOMATIC LOCATION**
Genetic locus: MYOC (human) mapping to 1q24.3; Myoc (mouse) mapping to 1H2.1.

**SOURCE**
myocilin (H-130) is a rabbit polyclonal antibody raised against amino acids 240-370 mapping within an internal region of myocilin of human origin.

**PRODUCT**
Each vial contains 200 µg IgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

**STORAGE**
Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**APPLICATIONS**
myocilin (H-130) is recommended for detection of myocilin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

myocilin (H-130) is also recommended for detection of myocilin in additional species, including equine, canine and bovine.

Suitable for use as control antibody for myocilin siRNA (h): sc-40753, myocilin siRNA (m): sc-40754, myocilin shRNA Plasmid (h): sc-40753-SH, myocilin shRNA Plasmid (m): sc-40754-SH, myocilin shRNA (h) Lentiviral Particles: sc-40753-V and myocilin shRNA (m) Lentiviral Particles: sc-40754-V.

Molecular Weight of myocilin: 57 kDa.
Positive Controls: myocilin (h): 293T Lysate: sc-114465.

**RECOMMENDED SECONDARY REAGENTS**
To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

**DATA**

**SELECT PRODUCT CITATIONS**

**RESEARCH USE**
For research use only, not for use in diagnostic procedures.