APH586Mu61 100μg
Active Myocilin (MYOC)
Organism Species: *Mus musculus (Mouse)*
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Eukaryotic expression.
Host: 293F cell
Residues: Ile213~Met490
Tags: N-terminal His-tag
Purity: >80%
Endotoxin Level: <1.0EU per 1μg (determined by the LAL method).
Buffer Formulation: PBS, pH7.4, containing 5% Trehalose .
Original Concentration: 200μg/mL
Applications: Cell culture; Activity Assays.
(May be suitable for use in other assays to be determined by the end user.)
Predicted isoelectric point: 6.1
Predicted Molecular Mass: 32.9kDa
Accurate Molecular Mass: 33kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.
Store at 2-8°C for one month.
Aliquot and store at -80°C for 12 months.
Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the

protein at 37ºC for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCE]

ILKENPSGRP RSKEGDKGCG ALVWVGEPVT LRTAETIAGK YGVWMRDPKP THPYTQESTW
RIDTVGTEIR QVFEYSQISQ FEQGYPSKVH VLPRALESTG AVVYAGSLYF QGAESRTVVR
YELDTETVKA EKEIPGAGYH GHFPYAWGGY TDIDLAVDES GLWVIYSTEE AKGAIVLSKL
NPANLELERT WETNIRKQSV ANAFVICGIL YTVSSYSSAH ATVNFAYDTK TGTSKTLTIP
FTNRYKYSSM IDYNPLERKL FAWDNFNMVT YDIKLLEM

[ACTIVITY]

Myocilin (MYOC) is a secreted protein found in human aqueous humor (AH). Mutations of the MYOC gene are associated with primary open angle glaucoma (POAG), which is a complex disorder with a major heritable component. Myocilin stimulates cell migration that involves the activation of intergrin focal adhesion kinase (FAK)-serin/threonine kinase (AKT) signaling pathway. To test the effect of MYOC on cell proliferation, AGS cells were seeded into triplicate wells of 96-well plates and allowed to attach, replaced with various concentrations of recombinant mouse MYOC. After incubated for 72h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10 μl of CCK-8 solution was added to each well of the plate, then the absorbance at 450 nm was measured using a microplate reader after incubating the plate for 1-4 hours at 37 ℃. Cell viability was assessed by CCK-8 assay after incubation with recombinant mouse MYOC for 72h. The result was shown in Figure 1. It was obvious that MYOC significantly increased cell viability of AGS cells. The ED50 of recombinant mouse MYOC is 1.033 μg/ml.

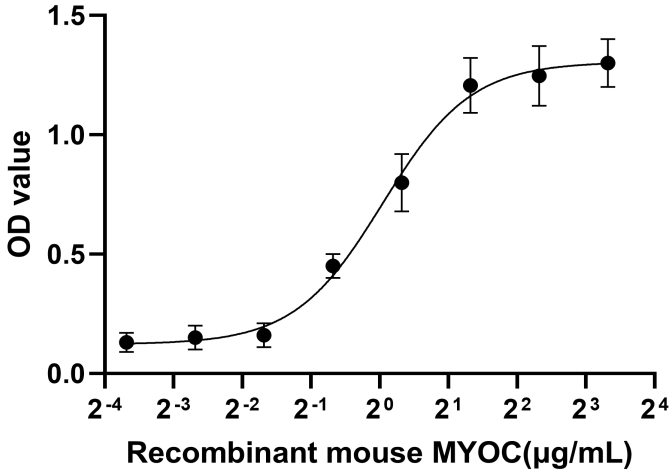

Figure1. The dose-effect curve of recombinant mouse MYOC on AGS cells

[IDENTIFICATION]

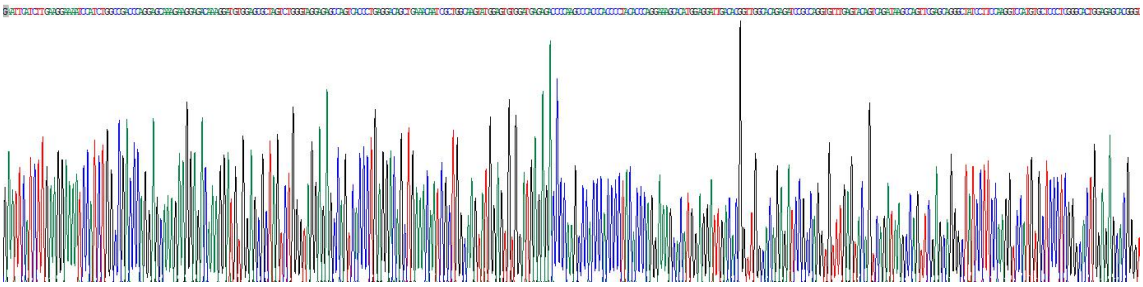

Figure 2. Gene Sequencing (extract)

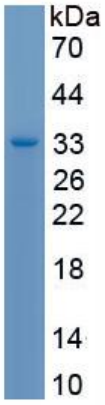

Figure 3. SDS-PAGE

Sample: Active recombinant MYOC, Mouse

[IMPORTANT NOTE]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.