SANTA CRUZ BIOTECHNOLOGY, INC.

# Myo-inositol oxygenase (FL-285): sc-99230

SANTA CRUZ BIOTECHNOLOGY
*The Power to Question*

## BACKGROUND

Myo-inositol oxygenase (MIOX), also known as ALDRL6, is a renal-specific member of the Aldo-keto reductase family. It catalyzes the first committed step in the Myo-inositol metabolism pathway and is widely distributed in mammalian tissues. Human Myo-inositol oxygenase shares 91% and 96% sequence homology with mouse and pig Myo-inositol oxygenase homologs, respectively. Myo-inositol oxygenase is responsible for the oxidative cleavage of Myo-inositol (MI) and its epimer D-chiro inositol (DCI) to D-glucuronate. The dioxygen-dependent cleavage of the C1-C6 bond in Myo-inositol is accomplished through the utilization of the Fe(II)/Fe(III) binuclear iron center of MIOX. Myo-inositol oxygenase has also been implicated in complications of diabetes, including diabetic nephropathy.

## CHROMOSOMAL LOCATION

Genetic locus: MIOX (human) mapping to 22q13.33; Miox (mouse) mapping to 15 E3.

## SOURCE

Myo-inositol oxygenase (FL-285) is a rabbit polyclonal antibody raised against amino acids 1-285 representing full length Myo-inositol oxygenase 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

Myo-inositol oxygenase (FL-285) is recommended for detection of Myo-inositol oxygenase 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).

Myo-inositol oxygenase (FL-285) is also recommended for detection of Myo-inositol oxygenase in additional species, including equine, canine and bovine.

Suitable for use as control antibody for Myo-inositol oxygenase siRNA (h): sc-61117, Myo-inositol oxygenase siRNA (m): sc-61118, Myo-inositol oxygenase shRNA Plasmid (h): sc-61117-SH, Myo-inositol oxygenase shRNA Plasmid (m): sc-61118-SH, Myo-inositol oxygenase shRNA (h) Lentiviral Particles: sc-61117-V and Myo-inositol oxygenase shRNA (m) Lentiviral Particles: sc-61118-V.

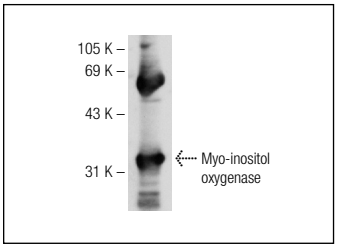
Molecular Weight of Myo-inositol oxygenase: 33 kDa.

Positive Controls: mouse kidney extract: sc-2255 or rat kidney extract: sc-2394.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: 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




Myo-inositol oxygenase (FL-285): sc-99230. Western blot analysis of Myo-inositol oxygenase expression in mouse kidney tissue extract.

## SELECT PRODUCT CITATIONS

1. Drew, P.D., et al. 2000. Inhibition of microglial cell activation by Cortisol. Brain Res. Bull. 52: 391-396.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS Satisfaction Guaranteed

Try **Myo-inositol oxygenase (E-11): sc-376080** or **Myo-inositol oxygenase (E-9): sc-166913**, our highly recommended monoclonal alternatives to Myo-inositol oxygenase (FL-285).