

## MIOX Conjugated Antibody

Catalog No: #C43378



Package Size: #C43378-AF350 100ul #C43378-AF405 100ul #C43378-AF488 100ul  
 #C43378-AF555 100ul #C43378-AF594 100ul #C43378-AF647 100ul  
 #C43378-AF680 100ul #C43378-AF750 100ul #C43378-Biotin 100ul

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## Description

Product Name	MIOX Conjugated Antibody
Host Species	Rabbit
Clonality	Polyclonal
Species Reactivity	Hu
Specificity	The antibody detects endogenous levels of total MIOX protein.
Immunogen Description	Full length fusion protein of human MIOX
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	ALDRL6
Accession No.	Swiss-Prot#:Q9UGB7NCBI Gene ID:55586NCBI mRNA#:BC012025
Uniprot	Q9UGB7
GeneID	55586;
Excitation Emission	AF350: 346nm/442nm AF405: 401nm/421nm AF488: 493nm/519nm AF555: 555nm/565nm AF594: 591nm/614nm AF647: 651nm/667nm AF680: 679nm/702nm AF750: 749nm/775nm
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

## Application Details

## Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250

AF405 conjugated: most applications: 1: 50 - 1: 250

AF488 conjugated: most applications: 1: 50 - 1: 250

AF555 conjugated: most applications: 1: 50 - 1: 250

AF594 conjugated: most applications: 1: 50 - 1: 250

AF647 conjugated: most applications: 1: 50 - 1: 250

AF680 conjugated: most applications: 1: 50 - 1: 250

AF750 conjugated: most applications: 1: 50 - 1: 250

Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1: 50 - 1: 1,000

## Background

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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.

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Note: This product is for in vitro research use only