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**Product Data Sheet**


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Product Name: MIOX Human  
 Cat. No.: GP21924  
 Batch No.: 1

**Product Data**

Purity	>98%	Source	Escherichia Coli.
Physical Appearance	solid	Shipping Condition	Shipped at Room temp.
Synonyms	Myo-Inositol Oxygenase; Kidney-Specific Protein 32; Aldehyde Reductase (Aldose Reductase) Like 6; Renal-Specific Oxidoreductase; Aldehyde Reductase-Like 6; MI Oxygenase; EC 1.13.99.1; ALDRL6; Inositol Oxygenase; KSP32; RSOR; MIOX.		
Amino Acid Sequence	MKHHHHHHASMKVTVGPDPS LVYRPDVDPE VAKDKASFRN YTSGPLLDREV FTTYKLMHHTH QTVDFVRSKH AQFGGFSYKK MTVMEAVDLL DGLVDESDPD VDFPNSFHAF QTAEGIRKAH PDKDWFHLVG LLHDLGKVLA LFGEPQWAVV GDTFPVGCRP QASVVFCDST FQDNPDLDQP RYSTEELGMYQ PHCGLDRVLM SWGHDEYMYQ VMKFNKFSLP PEA FYMIRFH SFYPWHTGRD YQQLCSQQDL AMLPWWREFN KFDLYTKCPD LPDVKLRPY YQGLIDKYCP GILSW.		
Solubility	It is recommended to add 200?l of deionized water to prepare a working stock solution of approximately 0.5mg/ml and let the lyophilized pellet dissolve completely. MIOX is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.		
Formulation	MIOX was filtered (0.4 μm) and lyophilized in 20mM Tris buffer, 50mM NaCl and 5% (w/v) trehalose, pH 7.5.		

**Introduction**

Inositol oxygenase is a non-heme di-iron enzyme which oxidizes myo-inositol to glucuronic acid. In addition, inositol oxygenase oxidizes the less abundant chiro isomer of inositol. MIOX enzyme is a component of the only known pathway for the catabolism of inositol in humans. MIOX is expressed mostly in the kidneys. Reduction of Inositol Oxygenase and accumulation of polyols, such as inositol and xylitol, have been implicated as contributing factors in complications linked with diabetes.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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Address: 10292 Central Ave. #205, Montclair, CA, USA

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### Stability

Store lyophilized protein at -20°C . Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after two weeks at 4°C .

### Background

MIOX Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain (Met1-Trp285) containing 295 amino acids including a 10 aa His tag at N-terminus. The total calculated molecular mass is 34.2kDa.

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