

## 32-2540: MIOX Recombinant Protein

### Alternative Name :

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.

### Description

Source : Escherichia Coli. 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. 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.

### Product Info

<b>Amount :</b>	10 µg
<b>Purification :</b>	Greater than 95.0% as determined by SDS-PAGE.
<b>Content :</b>	MIOX was filtered (0.4µm) and lyophilized in 20mM Tris buffer, 50mM NaCl and 5% (w/v) trehalose, pH 7.5.
<b>Storage condition :</b>	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.
<b>Amino Acid :</b>	MKHHHHHHASMKVTVGPDPS LVYRPDVPDPE VAKDKASFRN YTSGPLLDRV FTTYKLMHHTH QTVDFVRSKH AQFGGFSYKK MTVMEAVDLL DGLVDESDPD VDFPNSFHAF QTAEGIRKAH PDKDWFHLVG LLHDLGKVL A LFGEPQWAVV GDTFPVGCPR QASVVFCDST FQDNPDLDQP RYSTELGMYQ PHCGLDRVLM SWGHDEYMYQ VMKFNKFSLP PEA FYMIRFH SFYPWHTGRD YQQLCSQQDL AMLPWVREFN KFDLYTKCPD LPDVKLRPY YQGLIDKYCP GILSW.

### Application Note

It is recommended to add 200µl 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.

