# abcam

### Product datasheet

## Recombinant human SOD2/MnSOD protein ab93946

2 References 1 图像

描述

产品名称 重组人SOD2/MnSOD蛋白

生物活性 Specific activity is > 1,200 units/mg, in which one unit will inhibit the rate of reduction of

cytochrome c by 50% in a coupled system, using xanthine and Xanthine oxidase at pH 7.8 at

25°C in a 1.5 ml reaction volume.

**Activity Assay** 

Prepare a 1.5 ml reaction mix into a suitable container and pre-chill on ice before use: The final concentrations are 50mM potassium phosphate, 0.1mM ethylendiaminetetraacetic

acid, 0.01 mM cytochrome C, 0.05 mM xanthine, 0.005 units xanthine oxidase.

Equilibrate to 25°C and monitor at A550nm until the value is constant using a

spectrophotometer.

Add 50 ul of recombinant SOD protein in various concentrations (0.5 ug, 1 ug) in assay

buffer.

Mix by inversion and record the increase at A550nm for 5 minutes.

纯**度** > 95 % SDS-PAGE.

ab93946 was purified using conventional chromatography techniques.

表达系统 Escherichia coli

**蛋白长度** Full length protein

无动物成分 No

性质 Recombinant

种属 Human

序列 MGSSHHHHHHSSGLVPRGSHMKHSLPDLPYDYGALEPHINAQ

 ${\tt IMQLHHSK}$ 

HHAAYVNNLNVTEEKYQEALAKGDVTAQIALQPALKFNGGGH

INHSIFWT

NLSPNGGGEPKGELLEAIKRDFGSFDKFKEKLTAASVGVQGS

**GWGWLGFN** 

KERGHLQIAACPNQDPLQGTTGLIPLLGIDVWEHAYYLQYKN

VRPDYLKA IWNVINWENVTERYMACKK

技术指标

Our **Abpromise guarantee** covers the use of **ab93946** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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应用 SDS-PAGE

Mass Spectrometry

质**谱法** MALDI-TOF

形式 Liquid

#### 制备和贮存

稳定性和存储 Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

pH: 8.00

Constituents: 0.316% Tris HCI, 20% Glycerol (glycerin, glycerine)

This product is an active protein and may elicit a biological response in vivo, handle with caution.

#### 常规信息

功能 Destroys superoxide anion radicals which are normally produced within the cells and which are

toxic to biological systems.

疾病相关 Genetic variation in SOD2 is associated with susceptibility to microvascular complications of

diabetes type 6 (MVCD6) [MIM:612634]. These are pathological conditions that develop in numerous tissues and organs as a consequence of diabetes mellitus. They include diabetic retinopathy, diabetic nephropathy leading to end-stage renal disease, and diabetic neuropathy. Diabetic retinopathy remains the major cause of new-onset blindness among diabetic adults. It is

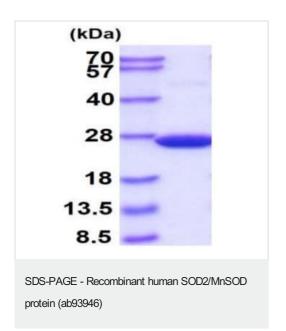
characterized by vascular permeability and increased tissue ischemia and angiogenesis.

**序列相似性** Belongs to the iron/manganese superoxide dismutase family.

翻译后修饰 Nitrated under oxidative stress. Nitration coupled with oxidation inhibits the catalytic activity.

细**胞定位** Mitochondrion matrix.

#### 图片



15% SDS-PAGE analysis of ab93946 (3µg)

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