abcam

Product datasheet

Recombinant human Superoxide Dismutase 1 protein (Active) ab112193

4 References 1 图像

描述

产品名称	重组人Superoxide Dismutase 1蛋白(Active)
生物活性	This protein is fully biologically active when compared to standard. Activity tests were carried using **ab65354**. The activity assay kit showed that the calculated activity was ~40,000 U/mg.
纯度	> 95 % SDS-PAGE. > 95% SDS-PAGE. The Cu/Zn SOD is purified by proprietary chromatographic techniques.
表达系统	Escherichia coli
Accession	**P00441**
蛋白长度	Full length protein
无动物成分	No
性质	Recombinant
种属	Human
预测分子量	17 kDa

技术指标

Our **Abpromise guarantee** covers the use of **ab112193** in the following tested applications.

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

应用	SDS-PAGE Functional Studies
形式	Lyophilized
补充说明	This product is manufactured by BioVision, an Abcam company and was previously called 4802 Superoxide Dismutase (SOD), human recombinant. 4802-100 is the same size as the 100 µg size of ab112193. Endotoxin Levels: <0.1 ng/mg.

制备和贮存

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

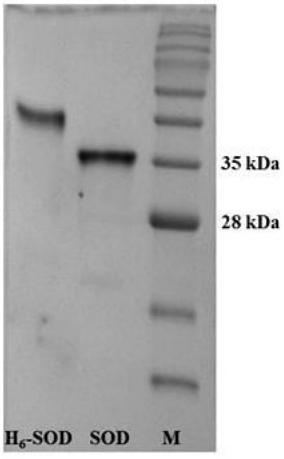
pH: 7.40
Constituents: 10.269% Trehalose, 0.727% Dibasic monohydrogen potassium phosphate, 0.248% Monobasic dihydrogen potassium phosphate

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

常规信息

功能	Destroys radicals which are normally produced within the cells and which are toxic to biological systems.
疾病相关	Defects in SOD1 are the cause of amyotrophic lateral sclerosis type 1 (ALS1) [MIM:105400]. ALS1 is a familial form of amyotrophic lateral sclerosis, a neurodegenerative disorder affecting upper and lower motor neurons and resulting in fatal paralysis. Sensory abnormalities are absent. Death usually occurs within 2 to 5 years. The etiology of amyotrophic lateral sclerosis is likely to be multifactorial, involving both genetic and environmental factors. The disease is inherited in 5-10% of cases leading to familial forms.
序列相似性	Belongs to the Cu-Zn superoxide dismutase family.
翻译后修饰	Unlike wild-type protein, the pathogenic variants ALS1 Arg-38, Arg-47, Arg-86 and Ala-94 are polyubiquitinated by RNF19A leading to their proteasomal degradation. The pathogenic variants ALS1 Arg-86 and Ala-94 are ubiquitinated by MARCH5 leading to their proteasomal degradation. The ditryptophan cross-link at Trp-33 is reponsible for the non-disulfide-linked homodimerization. Such modification might only occur in extreme conditions and additional experimental evidence is required.
细胞定位	Cytoplasm. The pathogenic variants ALS1 Arg-86 and Ala-94 gradually aggregates and accumulates in mitochondria.

图片



SDS-PAGE - Recombinant human Superoxide Dismutase 1 protein (Active) (ab112193)

20 ug of non-reduced ab112193 on SDS-PAGE, stained with Coomassie Blue after protein migration.

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