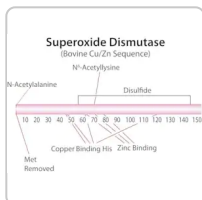


Saisir le nom du produit, le numéro de lot, etc.



Toutes les
photos (7)

Documents

FDS

COO/COA

 Fiche des
caractéristiques

Plus de
documents »

S7571 ► Sigma-Aldrich.

Superoxide Dismutase from bovine erythrocytes

★★★★★ (0)

lyophilized powder, ≥3,000 units/mg protein

Synonyme(s):

SOD, Superoxide: superoxide oxidoreductase

Numéro CAS: 9054-89-1

Numéro EC: 232-943-0

NACRES: NA.54

Numéro de classification
(Commission des enzymes): 1.15.1.1 (BRENDA, IUBMB)

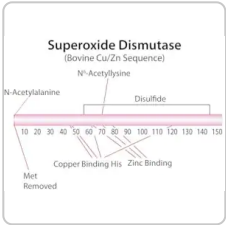
Numéro MDL: MFCD00132404

Référence	Conditionnement	Disponibilité	Prix	Quantité
S7571-15KU	15000 UNITS	Only 2 left in stock (more on the way) Détails...	107,00 €	− +
S7571-30KU	30000 UNITS	Only 4 left in stock (more on the way) Détails...	138,00 €	− +
S7571-75KU	75000 UNITS	Date d'expédition estimée le 03 novembre 2022	222,00 €	− +
S7571-300KU	300000 UNITS	Only 3 left in stock (more on the way) Détails...	664,00 €	− +

Demander une commande en gros

Ajouter au panier

PRODUITS RECOMMANDÉS



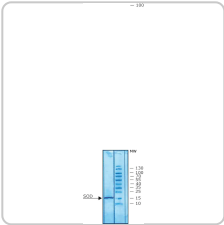
Sigma-Aldrich

S5395

Superoxide Dismutase from bovine erythrocytes

≥3,000 units/mg protein, BioReagent, lyophilized powder, suitable for cell culture

[Consulter le prix et la disponibilité](#)



Sigma-Aldrich

S9697

Superoxide Dismutase bovine

recombinant, expressed in *E. coli*, lyophilized powder, ≥2500 units/mg protein, ≥90% (SDS-PAGE)

[Consulter le prix et la disponibilité](#)

PROPRIÉTÉS

Forme	lyophilized powder
Niveau de qualité	300
specific activity	≥3,000 units/mg protein
Poids mol.	32.5 kDa
Composition	Protein, ≥95% biuret

Caractéristiques du produit alternatif plus écologique

Atom Economy

Design for Energy Efficiency

Use of Renewable Feedstocks

Learn more about the [Principles of Green Chemistry](#).

pI

4.95

N° d'accès UniProt

[P00442](#)[P41976](#)

application(s)

diagnostic assay manufacturing

Autre catégorie plus écologique

[Re-engineered](#)

Temp. de stockage

-20°C

Gene Information

cow ... [SOD1\(281495\)](#) , [SOD2\(281496\)](#)Vous recherchez des produits similaires ? Visitez [Guide de comparaison des produits](#)**Catégories apparentées**[Greener Alternative Products](#)**DESCRIPTION****Description générale**

Superoxide dismutases are a group of low molecular weight metalloproteins present in all aerobic cells of plants, animals and micro-organisms. They provide protection against damaging reactions with the superoxide radical anion (O₂⁻) by catalyzing its

disproportionation into oxygen and hydrogen peroxide.

Application

Superoxide dismutase from bovine erythrocytes has been used in a study to assess a kinetic model of radiation-induced inactivation of superoxide dismutase in nitrous oxide-saturated solutions. Superoxide dismutase from bovine erythrocytes has also been used in a study to investigate the possible participation of superoxide anion in the intestinal tryptophan 2,3-dioxygenase reaction.

Conditionnement

15000 units in glass bottle

30000, 75000, 300000 units in poly bottle

Actions biochimiques/physiologiques

Catalyzes the dismutation of superoxide radicals to hydrogen peroxide and molecular oxygen. Plays a critical role in the defense of cells against the toxic effects of oxygen radicals. Competes with nitric oxide (NO) for superoxide anion (which reacts with NO to form peroxynitrite), thereby SOD promotes the activity of NO. SOD has also been shown to suppress apoptosis in cultured rat ovarian follicles, neural cell lines, and transgenic mice.

Définition de l'unité

One unit will inhibit reduction of cytochrome c by 50% in a coupled system with xanthine oxidase at pH 7.8 at 25 °C in a 3.0 ml reaction volume. Xanthine oxidase concentration should produce an initial ΔA_{550} of 0.025 ± 0.005 per min.

Forme physique

Lyophilized powder, essentially salt-free

PRODUITS APPARENTÉS

Application

G001835

HPLC Analysis of Superoxide Dismutase on Discovery® BIO PolyMA-WAX, application for HPLC

[View Pricing](#)

INFORMATIONS SUR LA SÉCURITÉ

Code de la classe de stockage

11 - Combustible Solids

WGK

WGK 3

Flash Point(F)

Not applicable

Point d'éclair C

Not applicable

Équipement de protection individuelle

Eyeshields, Gloves, type N95 (US)

DOCUMENTATION

Certificat d'analyse

Saisir un numéro de lot pour rechercher un certificat d'analyse (COA).

Numéro de lot

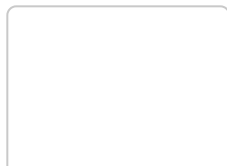
e.g. 023J5431

Comment saisir un numéro de lot (COA)**Rechercher****Certificat d'origine**

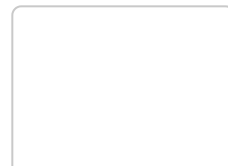
Saisir un numéro de lot pour rechercher un certificat d'origine (COO).

Numéro de lot

e.g. 023J5431

Comment saisir un numéro de lot (COO)**Rechercher****Plus De Documents****Enzyme Explorer****FDS****LES CLIENTS ONT ÉGALEMENT CONSULTÉ**

Sigma-Aldrich

S9076**Superoxide Dismutase I human**recombinant, expressed in *E. coli*

Sigma-Aldrich

SAB2108614**Anti-GADD45B**

affinity isolated antibody

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ARTICLES REVUS PAR DES PAIRS

Phototoxic effects of PAH and UVA exposure on molecular responses and developmental success in coral larvae.

Sebastian Overmans et al.

Aquatic toxicology (Amsterdam, Netherlands), 198, 165-174 (2018-03-20)

Exposure to polycyclic aromatic carbons (PAHs) poses a growing risk to coral reefs due to increasing shipping and petroleum extraction in tropical waters. Damaging effects of specific PAHs can be further enhanced by the presence of ultraviolet radiation, known as

Tight Regulation of Extracellular Superoxide Points to Its Vital Role in the Physiology of the Globally Relevant *Roseobacter* Clade.

Colleen M Hansel et al.

mBio, 10(2) (2019-03-14)

There is a growing appreciation within animal and plant physiology that the reactive oxygen species (ROS) superoxide is not only detrimental but also essential for life. Yet, despite widespread production of extracellular superoxide by healthy bacteria and phytoplankton, this molecule

Possible participation of superoxide anion in the intestinal tryptophan 2,3-dioxygenase reaction.

F Hirata et al.

The Journal of biological chemistry, 246(24), 7825-7826 (1971-12-25)

Oxygen-dependence of mitochondrial ROS production as detected by Amplex Red assay.

Vera G Grivennikova et al.

Redox biology, 17, 192-199 (2018-04-28)

The initial rates of superoxide plus hydrogen peroxide (ROS) generation by intact or permeabilized rat heart mitochondria and coupled inside-out bovine heart submitochondrial particles (SMP) oxidizing NAD-dependent substrates, NADH, and succinate were measured by detecting resorufin

formation in the Amplex

Salvage of nonischemic control lung from injury by unilateral ischemic lung with apocynin, a nicotinamide adenine dinucleotide phosphate (NADPH) oxidase inhibitor, in isolated perfused rat lung.

Chenting Zhu et al.

Translational research : the journal of laboratory and clinical medicine, 152(6), 273-282 (2008-12-09)

Ischemia reperfusion (I/R) injury of the lung affects the function of the nonischemic lung. Our objective is to determine how apocynin, which is a nicotinamide adenine dinucleotide phosphate (NADPH) oxidase inhibitor, protects the nonischemic control right lung (RL) from injury

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PROTOCOLES ET ARTICLES SCIENTIFIQUES

Articles

Mitochondrial Stress and ROS

Oxidative stress is mediated, in part, by reactive oxygen species produced by multiple cellular processes and controlled by cellular antioxidant mechanisms such as enzymatic scavengers or antioxidant modulators. Free radicals, such as reactive oxygen species, cause cellular damage via...

Protocoles

Enzymatic Assay of Superoxide Dismutase

Enzymatic Assay of Superoxide Dismutase

HPLC Analysis of Superoxide Dismutase on Discovery® BIO PolyMA-WAX

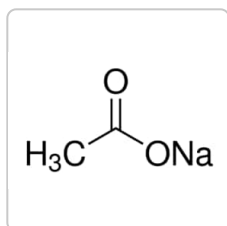
Separation of Superoxide dismutase

Chromatograms

HPLC Analysis of Superoxide Dismutase on Discovery® BIO PolyMA-WAX

application for HPLC

PRODUITS CONSULTÉS RÉCEMMENT



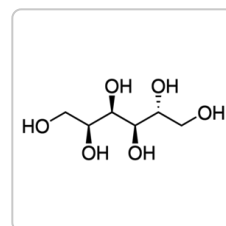
Sigma-Aldrich

S7545

Sodium acetate

BioXtra, ≥99.0%

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Sigma-Aldrich

S7547

D-Sorbitol

BioXtra, ≥98%

[Consulter le prix et la disponibilité](#)



Évaluations



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Questions

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Notre équipe de scientifiques dispose d'une expérience dans tous les secteurs de la recherche, notamment en sciences de la vie, science des matériaux, synthèse chimique, chromatographie, analyse et dans de nombreux autres domaines..

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