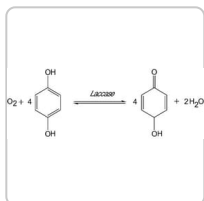


Saisir le nom du produit, le numéro de lot, etc.



Toutes les
photos (3)

Documents

FDS

COO/COA

 Fiche des
caractéristiques

Plus de
documents »

38429 ► Sigma-Aldrich.

Laccase from *Trametes versicolor*

★★★★★ (0)

powder, light brown, ≥0.5 U/mg

Synonyme(s):

Oxygen oxidoreductase

Numéro CAS: 80498-15-3

Numéro EC: 420-150-4

NACRES: NA.54

Numéro de classification
(Commission des enzymes):

1.10.3.2 (BRENDA, IUBMB)

Numéro MDL:

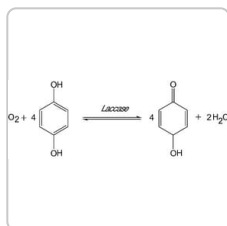
MFCD00131475

Référence	Conditionnement	Disponibilité	Prix	Quantité
38429-1G	1 G	Disponible pour expédition le 04 octobre 2022 Détails...	105,00 €	– +
38429-10G	10 G	Only 3 left in stock (more on the way) Détails...	652,00 €	– +

Demander une commande en gros

Ajouter au panier

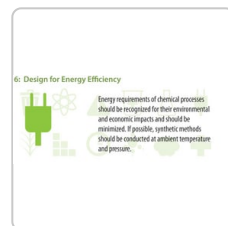
PRODUITS RECOMMANDÉS



Sigma-Aldrich

L2157**Laccase from *Rhus vernicifera***

crude acetone powder, ≥50 units/mg solid

[Consulter le prix et la disponibilité](#)


Sigma-Aldrich

40452**Laccase from *Agaricus bisporus***

powder, deep brown, ≥4 U/mg

[Consulter le prix et la disponibilité](#)

PROPRIÉTÉS

Forme powder

Niveau de qualité 100

specific activity ≥0.5 U/mg

Caractéristiques du produit alternatif plus écologique

Waste Prevention
Design for Energy Efficiency
Learn more about the [Principles of Green Chemistry](#).

Couleur light brown

Autre catégorie plus écologique **Enabling**

Temp. de stockage 2-8°C

Vous recherchez des produits similaires ? Visitez [Guide de comparaison des produits](#)

Catégories apparentées

[Greener Alternative Products](#)

DESCRIPTION

Description générale

Laccase is an enzyme, produced by ericoid mycorrhiza and ectomycorrhiza fungi. It belongs to the group of polyphenol oxidases. Laccase is also present in plants and bacteria.

We are committed to bringing you Greener Alternative Products, which adhere to one or more of The 12 Principles of Greener Chemistry. This product has been enhanced for energy efficiency and waste prevention when used in fuel cell and cellulosic ethanol research. For more information see the [article in biofiles](#) and [Enzymes for Alternative Energy Research](#).

Application

Laccase from *Trametes versicolor* has been used:

- to assess the use of four laccase-producing strains in waste water treatment
- in laccase assay
- in screening the lignols

Actions biochimiques/physiologiques

Some of the enzymatic actions of laccase are associated with sporulation, detoxification, morphogenesis, melanin polymerization and it offers protection to spore coat. Laccase can catalyse a number of substrates including medicinal drugs and halogenated pesticides. It utilizes oxygen for its catalysis. For these reasons, it might be useful in the biological degradation of micropollutants in wastewater treatment.

Laccase catalyzes the oxidation of phenol containing compounds, including lignin, through the reduction of oxygen to water. The presence of mediators will allow the oxidation of non-phenolic compounds as well. The primary function of laccase is to degrade lignin in fungi.

Définition de l'unité

One unit corresponds to the amount of enzyme which converts 1 μ mole of catechol per minute at pH 5.0 and 25 °C

Autres remarques

former nomenclature: *Coriolus versicolor*

INFORMATIONS SUR LA SÉCURITÉ

Pictograms



GHS08

Mention d'avertissement

Danger

Mentions de danger

H334

Conseils de prudence

P261 - P284 - P304 + P340 +
P312 - P501

Classification des risques

Resp. Sens. 1

Code de la classe de stockage

11 - Combustible Solids

WGK

WGK 1

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)

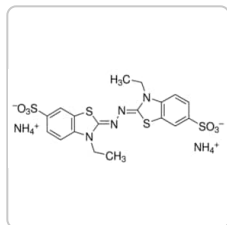
Rechercher

Plus De Documents

Enzyme Explorer

FDS

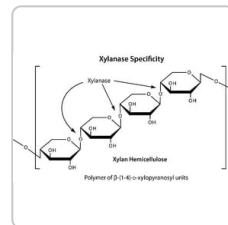
LES CLIENTS ONT ÉGALEMENT CONSULTÉ



Sigma-Aldrich

A1888

2,2'-Azino-bis(3-ethylbenzothiazoline-6-sulfonic acid) diammonium salt
≥98% (HPLC)

[Consulter le prix et la disponibilité](#)

Sigma-Aldrich

X2753**Xylanase**

powder, ≥2500 units/g, recombinant, expressed in *Aspergillus oryzae*

[Consulter le prix et la disponibilité](#)

ARTICLES REVUS PAR DES PAIRS

Vortex Fluidic-Mediated Fabrication of Fast Gelated Silica Hydrogels with Embedded Laccase Nanoflowers for Real-Time Biosensing under Flow.**Xuan Luo et al.***ACS applied materials & interfaces*, 12(46), 51999-52007 (2020-11-06)

The fabrication of hybrid protein-Cu₃(PO₄)₂ nanoflowers (NFs) via an intermediate toroidal structure is dramatically accelerated under shear using a vortex fluidic device (VFD), which possesses a rapidly rotating angled tube. As-prepared laccase NFs (LNFs) exhibit ≈1.8-fold increase in catalytic activity

Bioremediation of Industrial Pollutants by Insects Expressing a Fungal Laccase.**Michael Clark et al.***ACS synthetic biology*, 11(1), 308-316 (2021-12-10)

Inadequate management of household and industrial wastes poses major challenges to human and environmental health. Advances in synthetic biology may help address these challenges by engineering biological systems to perform new functions such as biomanufacturing of high-value compounds from low-value

Bacterial versus fungal laccase: potential for micropollutant degradation.

Jonas Margot et al.

AMB Express, 3(1), 63-63 (2013-10-25)

Relatively high concentrations of micropollutants in municipal wastewater treatment plant (WWTP) effluents underscore the necessity to develop additional treatment steps prior to discharge of treated wastewater. Microorganisms that produce unspecific oxidative enzymes such as laccases are a potential means to

Hindgut innate immunity and regulation of fecal microbiota through melanization in insects.

Qimiao Shao et al.

The Journal of biological chemistry, 287(17), 14270-14279 (2012-03-01)

Many insects eat the green leaves of plants but excrete black feces in an as yet unknown mechanism. Insects cannot avoid ingesting pathogens with food that will be specifically detected by the midgut immune system. However, just as in mammals

Multicopper oxidase laccases with distinguished spectral properties: A new outlook.

Komal Agrawal et al.

Heliyon, 6(5), e03972-e03972 (2020-05-22)

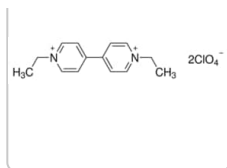
Multicopper oxidases (MCOs) has a unique feature of having the presence of four Cu atoms arranged into three (Type I, II and III) spectral classification. MCOs laccase due to its broad range of substrate specificity has numerous biotechnological applications. The

Afficher tous les articles scientifiques apparentés

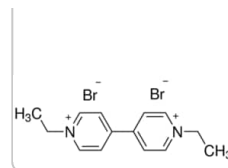
PRODUITS CONSULTÉS RÉCEMMENT

Sigma-Aldrich

Sigma-Aldrich

**384100****Ethyl viologen diperchlorate**

98%

[Consulter le prix et la disponibilité](#)**384097****Ethyl viologen dibromide**

99%

[Consulter le prix et la disponibilité](#)

Évaluations

[Soyez le premier à donner votre avis sur ce produit](#)

Questions

[Soyez le premier à poser une question](#)

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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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