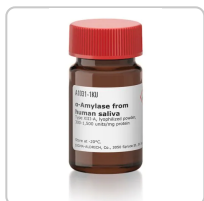


Saisir le nom du produit, le numéro de lot, etc.

[Toutes les photos](#) (4)

Documents

 [FDS](#) [COO/COA](#) [Fiche des caractéristiques](#)[Plus de documents](#) »**A1031** ▶ **Sigma-Aldrich.**

α-Amylase from human saliva

★★★★★ (0)

Type XIII-A, lyophilized powder, 300-1,500 units/mg protein

Synonyme(s):

1,4-α-D-Glucan-glucanohydrolase

Numéro CAS: **9000-90-2**Numéro EC: **232-565-6**

eCl@ss: 32160410

Numéro de classification
(Commission des enzymes): **3.2.1.1 (BRENDA, IUBMB)**Numéro MDL: **MFCD00081319**

NACRES: NA.54

Référence	Conditionnement	Disponibilité	Prix	Quantité
A1031-1KU	1000 UNITS	✓ Only 3 left in stock (more on the way) Détails...	107,00 €	− + 
A1031-5KU	5000 UNITS	✓ Date d'expédition estimée le 21 novembre 2022	387,00 €	− + 

[Demander une commande en gros](#)[Ajouter au panier](#)

PRODUITS RECOMMANDÉS



Sigma-Aldrich

A3176

α-Amylase from porcine pancreas

Type VI-B, ≥5 units/mg solid

Consulter le prix et la disponibilité



Sigma-Aldrich

A0521

α-Amylase from human saliva

Type IX-A, lyophilized powder, 1,000-3,000 units/mg protein

Consulter le prix et la disponibilité

PROPRIÉTÉS

Type	Type XIII-A
Niveau de qualité	200
Forme	lyophilized powder
specific activity	300-1,500 units/mg protein
Composition	Protein, 5-15% biuret
Caractéristiques du produit alternatif plus écologique	Waste Prevention Design for Energy Efficiency Learn more about the Principles of Green Chemistry .
N° d'accession UniProt	PODUB6

Autre catégorie plus écologique **Enabling**

Temp. de stockage -20°C

Gene Information human ... **AMY1A(276)**

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

Catégories apparentées

[Greener Alternative Products](#)

DESCRIPTION

Description générale

Human α -amylase is made up of 496 amino acids in a single polypeptide chain, which is encoded on chromosome 1. These are produced either in the salivary glands or the pancreas. The salivary and pancreatic α -amylases have homologous primary sequence but exhibit different cleavage patterns.

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 starch ethanol research. For more information see the [article in biofiles](#).

Application

α -Amylase is used to hydrolyze α bonds of α -linked polysaccharides, such as starch and glycogen. Product A1031 is from human saliva, is type IIA, and is supplied as a lyophilized powder. α -Amylase has been used in various plant studies, such as metabolism studies in *Arabidopsis*. α -Amylase from human saliva has been used to study the development of nutraceuticals, which may aid the treatment of diabetes and obesity.

Conditionnement

1000, 5000 units in glass bottle

Actions biochimiques/physiologiques

α -Amylase hydrolyzes the α -(1,4) glucan linkages in polysaccharides of three or more α -(1,4) linked D-glucose units. Natural substrates such as starch and glycogen are broken down into glucose and maltose.

Définition de l'unité

One unit will liberate 1.0 mg of maltose from starch in 3 min at pH 6.9 at 20 °C.

Forme physique

Lyophilized powder containing $(\text{NH}_4)_2\text{SO}_4$, sodium citrate and sodium chloride.

Autres remarques

View more information on [enzymes for complex carbohydrate analysis](https://www.sigma-aldrich.com/enzymeexplorer) at www.sigma-aldrich.com/enzymeexplorer

PRODUITS APPARENTÉS

Substrat

N1519

4-Nitrophenyl α -D-maltopentaoside, $\geq 98\%$

[View Pricing](#)

S7776

Starch Azure, Insoluble corn starch covalently linked with Remazol Brilliant Blue R

[View Pricing](#)

INFORMATIONS SUR LA SÉCURITÉ

Pictograms

**GHS08**

Mention d'avertissement

Danger

Mentions de danger

H334

Conseils de prudence

P261 - P342 + P311

Classification des risques

Resp. Sens. 1

Code de la classe de stockage

13 - Non Combustible Solids

WGK

WGK 1

Flash Point(F)

Not applicable

Point d'éclair C

Not applicable

DOCUMENTATION

Certificat d'analyse

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

Numéro de lot

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

Comment saisir un numéro de lot (COO)

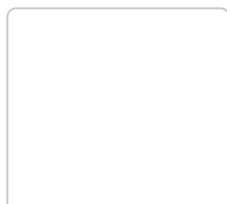
Rechercher

Plus De Documents

[Enzyme Explorer](#)

[FDS](#)

LES CLIENTS ONT ÉGALEMENT CONSULTÉ



Sigma-Aldrich

A6814

α -Amylase from *Bacillus* sp.

powder, ≥ 400 units/mg protein (Lowry)



Sigma-Aldrich

10069

α -Amylase from *Bacillus* sp.

powder, yellow-brown, ~ 380 U/mg

[Consulter le prix et la disponibilité](#)[Consulter le prix et la disponibilité](#)

ARTICLES REVUS PAR DES PAIRS

[In vitro adherence of Candida albicans to zirconia surfaces.](#)

Lana Zupancic Cepic et al.

Oral diseases, 26(5), 1072-1080 (2020-03-04)

This study aimed to characterize surface properties such as roughness (Ra) and surface-free energy (SFE) of glazed and polished yttria-stabilized zirconia and to evaluate in vitro adherence of fungus *Candida albicans* and salivary bacteria, *Staphylococcus epidermidis*, mixed with *C. albicans*

Aleix Lluansí et al.

Frontiers in microbiology, 12, 716307-716307 (2021-10-29)

Inflammatory bowel disease (IBD), including its two main categories (Crohn's disease and ulcerative colitis), has been linked both to gut microbiota and to diet. Bread is a daily food that has a potential capacity as a prebiotic. Our aim was

Digestive enzyme inhibitors from grains as potential components of nutraceuticals.

D Piasecka-Kwiatkowska, et al.

J. Nutr. Sci. Vitaminol., 58, 217-220 (2012)

[The structure of human pancreatic alpha-amylase at 1.8 Å resolution and comparisons with related enzymes.](#)

G D Brayer et al.

Protein science : a publication of the Protein Society, 4(9), 1730-1742 (1995-09-01)

The structure of human pancreatic alpha-amylase has been determined to 1.8 Å resolution using X-ray diffraction techniques. This enzyme is found to be composed of three structural domains. The largest is Domain A (residues 1-99, 169-404), which forms a central

[Potential anti-diabetic properties of Merlot grape pomace extract: An in vitro, in silico and in vivo study of α-amylase and α-glucosidase inhibition.](#)

Camila Gabriel Kato-Schwartz et al.*Food research international (Ottawa, Ont.), 137, 109462-109462 (2020-11-26)*

A practical approach to control glycemia in diabetes is to use plant natural products that delay hydrolysis of complex sugars and promote the diminution of the release of glucosyl units into the blood plasma. Polyphenolics have been described as being

[Afficher tous les articles scientifiques apparentés](#)

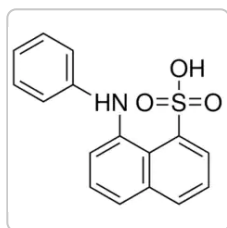
PROTOCOLES ET ARTICLES SCIENTIFIQUES

Protocoles

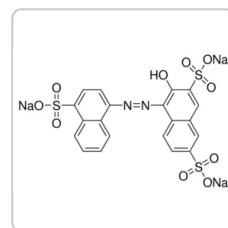
Enzymatic Assay of α -Amylase (EC 3.2.1.1)

Follow our procedure for the determination of alpha-Amylase activity. This enzymatic assay of a-Amylase guides you through the entire process and necessary calculations.

PRODUITS CONSULTÉS RÉCEMMENT



Sigma-Aldrich

A1028**8-Anilino-1-naphthalenesulfonic acid**[Consulter le prix et la disponibilité](#)

Sigma-Aldrich

A1016**Amaranth**

Dye content 85-95 %

[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

SERVICE TECHNIQUE

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..

Contacter notre Service technique

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