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E0127 ▶ **Sigma-Aldrich.**

Elastase from porcine pancreas

★★★★★ (0)

Type III, lyophilized powder, Protein 55-85 %, ≥4.0 units/mg protein

Synonyme(s):

Elastase from hog pancreas, Pancreatopeptidase E

Numéro CAS: **39445-21-1**

Numéro EC: **254-453-6**

NACRES: NA.54

Numéro de classification
(Commission des enzymes): **3.4.21.36 (BRENDA, IUBMB)**

Numéro MDL: **MFCD00130998**

Référence	Conditionnement	Disponibilité	Prix	Quantité	
E0127-5MG	5 MG	✓ Date d'expédition estimée le 25 novembre 2022	226,00 €	- +	
E0127-10MG	10 MG	✓ Date d'expédition estimée le 25 novembre 2022	406,00 €	- +	
E0127-20MG	20 MG	✓ Date d'expédition estimée le 25 novembre 2022	694,00 €	- +	
E0127-100MG	100 MG	✓ Date d'expédition estimée le 10 novembre 2022	1 730,00 €	- +	

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PRODUITS RECOMMANDÉS



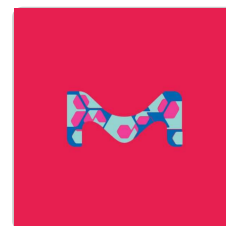
Sigma-Aldrich

E7885

Elastase from porcine pancreas

lyophilized powder, suitable for cell culture

[Consulter le prix et la disponibilité](#)



Sigma-Aldrich

E1250

Elastase from porcine pancreas

Type I, ≥ 4.0 units/mg protein

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PROPRIÉTÉS

Type	Type III
Niveau de qualité	200
Forme	lyophilized powder
specific activity	≥ 4.0 units/mg protein
Poids mol.	25.9 kDa
Composition	Protein, 55-85%

Solubilité	200 mM Tris HCl buffer, pH 8.8: soluble 1.0 mg/mL, clear
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Temp. de stockage	-20°C
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Vous recherchez des produits similaires ? Visitez [Guide de comparaison des produits](#)

Catégories apparentées

[Proteases](#)

DESCRIPTION

Conditionnement

5 mg in glass bottle

10, 20 mg in poly bottle

100 mg in glass bottle

Package size based on protein content

Application

Elastase from porcine pancreas has been used in a study to identify a novel bone/calcium metabolism-regulating factor in porcine pancreas. Elastase from porcine pancreas has also been used in a study to investigate the effect of a specific synthetic inhibitor of neutrophil elastase (ONO-5046) on the course of acute hemorrhagic pancreatitis in dogs.

Elastase from porcine pancreas has been used in the proteolytic cleavage of UMP synthase (Uridine-5'-monophosphate synthase). It has also been used along with collagenase to disperse tissue into single cells from the thoracic media, abdominal aortic media and intima of rabbit.

Actions biochimiques/physiologiques

Elastase is a single polypeptide chain of 240 amino acid residues and contains four disulfide bridges. The molecular mass is approximately 25.9 kDa. The enzyme is synthesized as an inactive zymogen, proelastase, which is converted to the active form by limited proteolysis at the N-terminal by trypsin. It is a serine protease with broad specificity. It cleaves protein at the carboxyl side of small hydrophobic amino acids such as Ile, Gly, Ala, Ser, Val, and Leu. The enzyme also hydrolyzes amides and esters such as N-Benzoyl-L-alanine methyl ester. The pH optimum is found to be 8.0-8.5. It does not require any activator, but it is inhibited by diisopropyl fluorophosphate, phenylmethanesulfonyl fluoride, α 2-macroglobulin, α 1-antitrypsin, sulfonyl fluorides, p-dinitrophenyl diethylphosphate and high salt concentrations. Elastase is extensively used in tissue and cell dissociation procedures. It is effective in the isolation of Type II lung cells.

Elastase hydrolyses elastin, the specific protein of elastic fibers, and digests hemoglobin, casein and fibrin.

Qualité

Contains trypsin activity

Définition de l'unité

One unit will hydrolyze 1.0 μ mole of N-succinyl-L-Ala-Ala-Ala-p-nitroanilide per min, pH 8.0 at 25 °C.

Forme physique

Contains sodium carbonate.

Notes préparatoires

2x crystallized and chromatographically purified

PRODUITS APPARENTÉS

Application

G001833

HPLC Analysis of Elastase on Discovery® BIO PolyMA-SCX, Ion Exchange, application for HPLC

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Inhibiteur

M6159

α 2-Macroglobulin from human plasma, BioUltra, $\geq$ 98% (SDS-PAGE)

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D7910

3,4-Dichloroisocoumarin, serine protease inhibitor

[View Pricing](#)

D0879

Diisopropylfluorophosphate

[View Pricing](#)

A9024

α 1-Antitrypsin from human plasma, salt-free, lyophilized powder

[View Pricing](#)

A6150

α ₁-Antitrypsin from human plasma, salt-free, lyophilized powder

[View Pricing](#)**Substrat****M9771**

N-Methoxysuccinyl-Ala-Ala-Pro-Val-7-amido-4-methylcoumarin, elastase substrate

[View Pricing](#)**S4760**

N-Succinyl-Ala-Ala-Ala-*p*-nitroanilide, elastase substrate

[View Pricing](#)**S8511**

N-Succinyl-Ala-Ala-Pro-Leu *p*-nitroanilide, protease substrate

[View Pricing](#)**INFORMATIONS SUR LA SÉCURITÉ****Pictograms****Mention d'avertissement**

Danger

Mentions de danger**H315 - H319 - H334 - H335****Conseils de prudence**



GHS07,GHS08

P261 - P264 - P271 - P302 +
P352 - P304 + P340 + P312 -
P305 + P351 + P338

Classification des risques

Eye Irrit. 2 - Resp. Sens. 1 -
Skin Irrit. 2 - STOT SE 3

Organes cibles

Respiratory system

**Code de la classe de
stockage**

11 - Combustible Solids

WGK

WGK 3

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

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

K3627**Kallikrein from porcine pancreas**

≥40 units/mg protein

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Sigma-Aldrich

C3142**α-Chymotrypsin from bovine pancreas**(TLCK treated to inactivate residual trypsin activity),
Type VII, essentially salt-free, lyophilized powder,...[Consulter le prix et la disponibilité](#)

ARTICLES REVUS PAR DES PAIRS

[Metabolism of atherogenic lipoproteins by smooth muscle cells of different phenotype in culture.](#)**J H Campbell et al.***Arteriosclerosis (Dallas, Tex.), 5(4), 318-328 (1985-07-01)*

Smooth muscle cells of the rabbit aorta, when grown in vitro, express three distinguishable forms of phenotype (contractile, reversible synthetic, and irreversible synthetic). We compared the interactions of these three smooth muscle phenotypes with rabbit very low density lipoprotein (VLDL)

Preventative effect of OMZ-SPT on lipopolysaccharide-induced acute lung injury and inflammation via nuclear factor-kappa B signaling in mice.

Ting Wang et al.

Biochemical and biophysical research communications, 485(2), 284-289 (2017-02-23)

Acute lung injury (ALI) is an early pathophysiologic change in acute respiratory distress syndrome and its management can be challenging. Omalizumab (Xolair™) is a recombinant DNA-derived, humanized antibody. OMZ-SPT is a polypeptide on the heavy chain of omalizumab monoclonal antibody.

Isolation and characterization of the orotidine 5'-monophosphate decarboxylase domain of the multifunctional protein uridine 5'-monophosphate synthase.

E E Floyd et al.

The Journal of biological chemistry, 260(16), 9443-9451 (1985-08-05)

The multifunctional protein uridine 5'-monophosphate (UMP) synthase catalyzes the final two reactions of the de novo biosynthesis of UMP in mammalian cells by the sequential action of orotate phosphoribosyltransferase (EC 2.4.2.10) and orotidine 5'-monophosphate (OMP) decarboxylase (EC 4.1.1.23). This protein

Boyer, P. D.

The Enzymes, 3(3), 323-373 (1971)

Functional expression of TMEM16A in taste bud cells.

Domenico M Guarascio et al.

The Journal of physiology, 599(15), 3697-3714 (2021-06-06)

Taste transduction occurs in taste buds in the tongue epithelium. The Ca²⁺ -activated Cl⁻ channels TMEM16A and TMEM16B play relevant physiological roles in several sensory systems. Here, we report that TMEM16A, but not TMEM16B, is expressed in the apical part

Afficher tous les articles scientifiques apparentés

PROTOCOLES ET ARTICLES SCIENTIFIQUES

Protocoles

Enzymatic Assay of Elastase (EC 3.4.21.36)

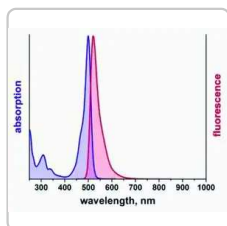
Enzymatic Assay of Elastase (EC 3.4.21.36), a continuous spectrophotometric rate determination.

Chromatograms

HPLC Analysis of Elastase on Discovery® BIO PolyMA-SCX, Ion Exchange

application for HPLC

PRODUITS CONSULTÉS RÉCEMMENT



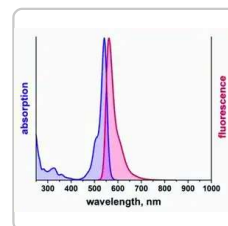
Sigma-Aldrich

DUO96020

Duolink® PLA Multicolor Probemaker Kit - Green

Proximity Ligation Assay Multiplexing: protein-protein interaction, post-translational modification and low...

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Sigma-Aldrich

DUO96030

Duolink® PLA Multicolor Probemaker Kit - Orange

Proximity Ligation Assay Multiplexing: protein-protein interaction, post-translational modification and low...

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Évaluations



Soyez le premier à donner votre avis sur ce produit

Questions

Soyez le premier à poser une question

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