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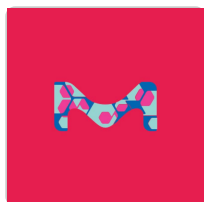
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P1512 ▶ **Sigma-Aldrich.****Thermolysin from *Geobacillus stearothermophilus***

★★★★★ (0)

Type X, lyophilized powder, 30-350 units/mg protein (E1%/280)

Synonyme(s):

Protease from *Geobacillus stearothermophilus*, Thermophilic-bacterial proteaseNuméro CAS: **9073-78-3**Numéro EC: **232-973-4**

eCl@ss: 32160410

Numéro de classification
(Commission des enzymes):**3.4.24.27 (BRENDA, IUBMB)**

Numéro MDL:

MFCD00165549

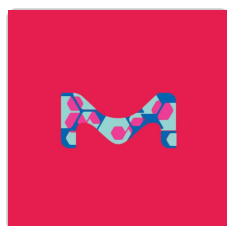
Référence	Conditionnement	Disponibilité	Prix	Quantité
P1512-25MG	25 MG	✓ Only 1 left in stock (more on the way) Détails...	117,00 €	- +
P1512-100MG	100 MG	✓ Only 5 left in stock (more on the way) Détails...	278,00 €	- +
P1512-250MG	250 MG	✓ Only 4 left in stock (more on the way) Détails...	539,00 €	- +
P1512-1G	1 G	✓ Only 1 left in stock (more on the way) Détails...	1380,00 €	- +

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PRODUITS RECOMMANDÉS



Sigma-Aldrich

T7902**Thermolysin from *Geobacillus stearothermophilus***

powder, BioReagent, 30-350 units/mg protein (E1%/280), suitable for cell culture

[Consulter le prix et la disponibilité](#)

Sigma-Aldrich

P5380**Protease from *Bacillus licheniformis***

Type VIII, lyophilized powder, 7-15 units/mg solid

[Consulter le prix et la disponibilité](#)

PROPRIÉTÉS

Source biologique	<i>Geobacillus stearothermophilus</i>
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Niveau de qualité	300
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Type	Type X
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Forme	lyophilized powder
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specific activity	30-350 units/mg protein (E1%/280)
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Expédié(e)s dans	wet ice
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Temp. de stockage	-20°C
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Catégories apparentées**Proteases**

DESCRIPTION**Description générale**

Thermolysin is a protease that has specificity different from other proteases available for sequence investigations.

Application**Non-specific Protease Activity Assay Video**

A thermostable (thermophilic) extracellular metalloendopeptidase containing four calcium ions. Cofactors are zinc and calcium. Hydrolyzes protein bonds on the N-terminal side of hydrophobic amino acid residues. The pH optimum is 8.0 and the optimal temperature for activity is 70 °C. Considerably stable from pH 5 to 9.5. Thermolysin has a low cleavage specificity, therefore, it produces a number of short fragments that are suitable for sequencing. Preferential cleavage: X-cleavage-Y-Z where X=any amino acid; Y=Leu, Phe, Ile, Val, Met, Ala and Z is any amino acid other than Pro. Cleavage N-terminal to Leu is preferred over cleavage of N-terminal to Phe which is preferred over the others. Often used to do limited proteolysis for peptide mapping and studies of protein structure and conformational changes.

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ester, the precursor for the artificial sweetener aspartame.

Conditionnement

25 mg in poly bottle

100, 250 mg in glass bottle

1 g in glass bottle

Qualité

Contains many extraneous enzymes.

Définition de l'unité

One unit will hydrolyze casein to produce color equivalent to 1.0 μ mole (181 μ g) of tyrosine per min at pH 7.5 at 37 °C (color by Folin-Ciocalteu reagent).

Forme physique

lyophilized powder containing calcium and sodium acetate buffer salts

Notes préparatoires

The pH optimum is 8.0 and the optimal temperature for activity is 70 °C. Considerably stable from pH 5 to 9.5. Thermolysin has a low cleavage specificity, therefore, it produces a number of short fragments that are suitable for sequencing. Preferential cleavage: X-cleavage-Y-Z where X=any amino acid; Y=Leu, Phe, Ile, Val, Met, Ala and Z is any amino acid other than Pro. Cleavage N-terminal to Leu is preferred over cleavage of N-terminal to Phe which is preferred over the others.

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**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 3

Flash Point(F)

Not applicable

Point d'éclair C

Not applicable

Équipement de protection individuelle

dust mask type N95 (US),
Eyeshields, Faceshields,
Gloves

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)

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Numéro de lot

e.g. 023J5431

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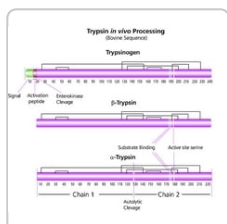
Rechercher

Plus De Documents

Enzyme Explorer

FDS

LES CLIENTS ONT ÉGALEMENT CONSULTÉ



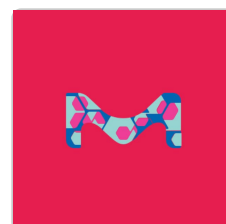
Sigma-Aldrich

T8802

Trypsin from bovine pancreas

TPCK Treated, essentially salt-free, lyophilized powder,
≥10,000 BAEE units/mg protein

Consulter le prix et la disponibilité



Sigma-Aldrich

P3303

Endoproteinase Asp-N from *Pseudomonas fragi* mutant strain

suitable for protein sequencing, lyophilized powder

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Synthesis of aspartame precursor with an immobilized thermolysin in mixed organic solvents.

M Miyanaga et al.

Biotechnology and bioengineering, 46(6), 631-635 (1995-06-20)

N-(benzyloxycarbonyl)-L-aspartyl-L-phenylalanine methyl ester, a precursor of the synthetic sweetener, aspartame, was synthesized from N-(benzyloxycarbonyl)-L-aspartic acid and L-phenylalanine methyl ester with an immobilized thermolysin (EC 3.4.24.4) in the mixed organic solvent system of tert-amyl alcohol and ethyl acetate. A mixed solvent

An ancient glaucophyte c6-like cytochrome related to higher plant cytochrome c6A is imported into muroplasts.

Friedrich Hans Kleiner et al.

Journal of cell science, 134(9) (2021-09-23)

Cytochrome c6 is a redox carrier in the thylakoid lumen of cyanobacteria and some eukaryotic algae. Although the isofunctional plastocyanin is present in land plants and the green alga *Chlamydomonas reinhardtii*, these organisms also possess a cytochrome c6-like protein designated

Sodium chloride enhances markedly the thermal stability of thermolysin as well as its catalytic activity.

K Inouye et al.

Biochimica et biophysica acta, 1388(1), 209-214 (1998-10-17)

Thermolysin, a thermophilic metalloproteinase, is markedly activated in the presence of high concentrations (1-5 M) of neutral salts. The activity increases in an exponential fashion with increasing salt concentration, and is enhanced 13-15 times with 4 M NaCl at pH

The use of thermolysin in amino acid sequence determination.

R P Ambler et al.

The Biochemical journal, 108(5), 893-895 (1968-08-01)

Monitoring Viral Entry in Real-Time Using a Luciferase Recombinant Vesicular Stomatitis Virus Producing SARS-CoV-2, EBOV, LASV, CHIKV, and VSV Glycoproteins.

Maria Fernanda Lay Mendoza et al.

Viruses, 12(12) (2020-12-23)

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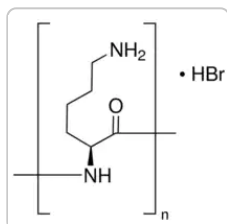


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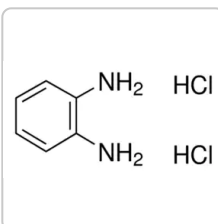
Sigma-Aldrich

P1524

Poly-L-lysine hydrobromide

mol wt $\geq 300,000$

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Sigma-Aldrich

P1526

o-Phenylenediamine dihydrochloride

peroxidase substrate

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Évaluations



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Questions

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