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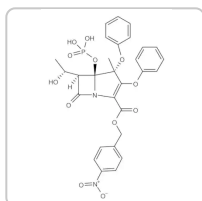
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Saisir le nom du produit, le numéro de lot, etc.



Toutes les
photos (1)

Documents

↓ FDS

🔍 COO/COA

📄 Fiche des
caractéristiques

Plus de
documents »

P4850 ▶ **Sigma-Aldrich.**

Proteinase K from *Tritirachium album*

★★★★★ (0)

buffered aqueous glycerol solution, for molecular biology, ≥800 units/mL

Synonyme(s):

Endopeptidase K

Numéro CAS: **39450-01-6**

Numéro de classification
(Commission des enzymes):

3.4.21.64 (BRENDA, IUBMB)

Numéro MDL: **MFCD00132129**

NACRES:

NA.54

Référence	Conditionnement	Disponibilité	Prix	Quantité
P4850-1ML	1 ML	✓ Disponible pour expédition le 10 octobre 2022 Les fabricants de produits de diagnostic devraient utiliser un produit d'une autre qualité : SRE0005 Détails...	115,00 €	– + 📘
P4850-5ML	5 ML	✓ Only 4 left in stock (more on the way) Détails...	384,00 €	– + 📘

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PRODUCTS RECOMMANDÉS



Sigma-Aldrich

P2308

Proteinase K from *Tritirachium album*

lyophilized powder, BioUltra, ≥30 units/mg protein, for molecular biology

Consulter le prix et la disponibilité



Millipore

70663

Proteinase K, Lyophilized

Highly active serine protease that exhibits broad cleavage specificity on native and denatured proteins...

Consulter le prix et la disponibilité

PROPRIÉTÉS

Qualité	for molecular biology
Niveau de qualité	200
Forme	buffered aqueous glycerol solution
Poids mol.	28.93 kDa
Concentration	≥10 mg/mL ≥800 units/mL
Impuretés	≤0.5 ppm DNA (PicoGreen® assay)

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DESCRIPTION

Application

Proteinase K from *Tritirachium album* has been used:

- in bovine endometrial epithelial cells for herpes viral DNA extraction
- for viral RNA extraction from nasal swabs
- as a component of phase lock and direct PCR lysis buffer

The product has been used to study its pre-treatment effects on the silk fibroin. The aspects analysed in this study included the crystallographic properties of hydroxyapatite (HAp), and the microstructure and microhardness of the composites. The enzyme has also been used to facilitate the access of probes to rRNA using FISH techniques to detect pathogenic *Staphylococcus aureus*.

Useful for the proteolytic inactivation of nucleases during the isolation of DNA and RNA.

Removes endotoxins that bind to cationic proteins such as lysozyme and ribonuclease A.

Reported useful for the isolation of hepatic, yeast, and mung bean mitochondria

Determination of enzyme localization on membranes

Treatment of paraffin embedded tissue sections to expose antigen binding sites for antibody labeling.

Digestion of proteins from brain tissue samples for prions in Transmissible Spongiform Encephalopathies (TSE) research.

Actions biochimiques/physiologiques

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pH is between 7.5-9.0 and its isoelectric point is 8.9. Ca^{2+} (1-5 mM) is required for its activation. Proteinase K is inhibited by DFP (diisopropylfluorophosphate) or PMSF (phenylmethylsulfonyl fluoride).

Proteinase K is a stable and highly reactive serine protease. Evidence from crystal and molecular structure studies indicates the enzyme belongs to the subtilisin family with an active-site catalytic triad (Asp³⁹-His⁶⁹-Ser²²⁴). It is stable in a broad range of environments: pH, buffer salts, detergents (SDS), and temperature. In the presence of 0.1-0.5% SDS, proteinase K retains activity and will digest a variety of proteins and nucleases in DNA preparations without compromising the integrity of the isolated DNA.

Définition de l'unité

One unit will hydrolyze urea-denatured hemoglobin to produce color equivalent to 1.0 μmole of tyrosine per min at pH 7.5 at 37 °C (color by Folin-Ciocalteu reagent).

Forme physique

Solution in 40% glycerol (v/v) containing 10 mM Tris-HCl, pH 7.5, with 1 mM calcium acetate.

Informations légales

PicoGreen is a registered trademark of Life Technologies

INFORMATIONS SUR LA SÉCURITÉ

Pictograms



GHS08

Mention d'avertissement

Danger

Mentions de danger

H334

Conseils de prudence

P261 - P284 - P501

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Not applicable

Équipement de protection individuelle

Eyeshields, Faceshields,
Gloves, type ABEK
(EN14387) respirator filter

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

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Numéro de lot

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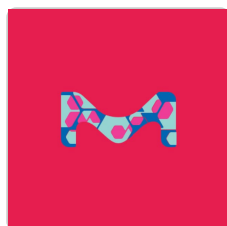


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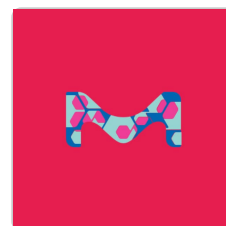
Sigma-Aldrich

1.24568

Proteinase K

(from *Tritirachium album*) chromatographically purified lyophilized 30 mAnson-U/mg for biochemistry and...

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Sigma-Aldrich

539480

Proteinase K from *Tritirachium album*

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ARTICLES REVUS PAR DES PAIRS

Proteinase K from *Tritirachium album* limber. I. Molecular mass and sequence around the active site serine residue.

K D Jany et al.

Biological chemistry Hoppe-Seyler, 366(5), 485-492 (1985-05-01)

The molecular mass of proteinase K was determined by gel electrophoresis in the presence of sodium dodecyl sulfate and by active site labelling with diisopropyl fluorophosphate. Both methods indicate molecular masses in the range of 27 000-29 000 Da. These

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Hybrid Assembly of the Genome of the Entomopathogenic Nematode *Steinernema carpocapsae* Identifies the X-Chromosome.

Lorrayne Serra et al.

G3 (Bethesda, Md.), 9(8), 2687-2697 (2019-05-23)

Entomopathogenic nematodes from the genus *Steinernema* are lethal insect parasites that quickly kill their insect hosts with the help of their symbiotic bacteria. *Steinernema carpocapsae* is one of the most studied entomopathogens due to its broad lethality to diverse insect

SNARE protein SEC22B regulates early embryonic development.

Shin-Rong J Wu et al.

Scientific reports, 9(1), 11434-11434 (2019-08-09)

The highly conserved SNARE protein SEC22B mediates diverse and critical functions, including phagocytosis, cell growth, autophagy, and protein secretion. However, these characterizations have thus far been limited to in vitro work. Here, we expand our understanding of the role Sec22b

Arrival of rabbit haemorrhagic disease virus 2 to northern Europe: Emergence and outbreaks in wild and domestic rabbits (*Oryctolagus cuniculus*) in Sweden.

A S Neimanis et al.

Transboundary and emerging diseases, 65(1), 213-220 (2017-04-14)

Incursion of rabbit haemorrhagic disease virus (RHDV) into Sweden was documented in 1990 and it is now considered endemic in wild rabbit (*Oryctolagus cuniculus*) populations. Rabbit haemorrhagic disease virus 2 (RHDV2), a new, related lagovirus was first detected in France

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PROTOCOLES ET ARTICLES SCIENTIFIQUES

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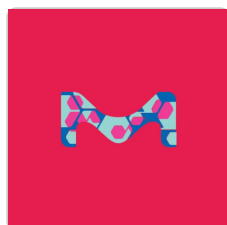
hemoglobin denatured with urea, and liberates Folin-postive amino acids and peptides. One unit will hydrolyze hemoglobin to produce color...

Protocoles

Enzymatic Assay of Proteinase K (EC 3.4.21.64)

Proteinase K (EC 3.4.21.64) activity can be measured spectrophotometrically using hemoglobin as the substrate. Proteinase K hydrolyzes hemoglobin denatured with urea, and liberates Folin-postive amino acids and peptides. One unit will hydrolyze hemoglobin to produce color...

PRODUITS CONSULTÉS RÉCEMMENT



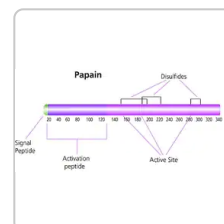
Sigma-Aldrich

P4860

Protease from *Bacillus licheniformis*

≥2.4 U/g

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Sigma-Aldrich

P4762

Papain from papaya latex

lyophilized powder, ≥10 units/mg protein

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Évaluations



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