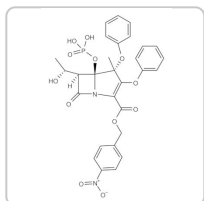


Saisir le nom du produit, le numéro de lot, etc.



Toutes les
photos (4)

Documents

FDS

COO/COA

 Fiche des
caractéristiques

Plus de
documents »

P6556 ► Sigma-Aldrich.

Proteinase K from *Tritirachium album*

★★★★★ (0)

lyophilized powder, ≥30 units/mg protein

Synonyme(s):

Endopeptidase K

Numéro CAS: 39450-01-6

Numéro EC: 254-457-8

eCl@ss: 32160410

Numéro de classification
(Commission des enzymes):

3.4.21.64 (BRENDA, IUBMB)

Numéro MDL:

MFCD00132129

NACRES:

NA.54

Référence	Conditionnement	Disponibilité	Prix	Quantité
P6556-5MG	5 MG	Only 1 left in stock (more on the way) Les fabricants de produits de diagnostic devraient utiliser un produit d'une autre qualité : SRE0005	45,90 €	- + Détails...
P6556-10MG	10 MG	Only 2 left in stock (more on the way)	51,10 €	- + Détails...
P6556-25MG	25 MG	Only 3 left in stock (more on the way)	73,80 €	- + Détails...
P6556-100MG	100 MG	Disponible pour expédition le 07 octobre 2022	185,00 €	- + Détails...

Référence	Conditionnement	Disponibilité	Prix	Quantité
P6556-500MG	500 MG	✓ Disponible pour expédition le 07 octobre 2022	Détails... 667,00 €	— + i
P6556-1G	1 G	✓ Disponible pour expédition le 07 octobre 2022	Détails... 1360,00 €	— + i

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

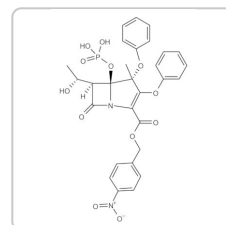
PRODUITS RECOMMANDÉS



Sigma-Aldrich

P2308**Proteinase K from *Tritirachium album***

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

[Consulter le prix et la disponibilité](#)

Sigma-Aldrich

P4850**Proteinase K from *Tritirachium album***

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

[Consulter le prix et la disponibilité](#)

PROPRIÉTÉS

Forme

lyophilized powder

Niveau de qualité	300
specific activity	≥30 units/mg protein
Poids mol.	28.93 kDa
Solubilité	H ₂ O: soluble 1 mg/mL, clear, colorless
Activité étrangère	Dnase ≤30 Kunitz units/mg solid RNase ≤0.003 Kunitz units/mg solid
Expédié(e)s dans	wet ice
Temp. de stockage	-20°C

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

DESCRIPTION

Application

Product P6556 is provided as a lyophilized powder. Product P6556 has been used to break down human lens protein. Protease footprinting by Proteinase K digestion can reveal protein-protein surface interactions. The enzyme from Sigma has been used in the pre-hybridization step of chicken embryos. It has also been used for the enrichment of PrP^{Sc}, a prion protein that is present in sheep, hamster and mouse scrapie samples.

Proteinase K is useful for the proteolytic inactivation of nucleases during the isolation of DNA and RNA. It is used for the removal of endotoxins bound to cationic proteins such as lysozyme and ribonuclease A. It is useful for the isolation of hepatic, yeast, and mung bean mitochondria

and is used to determine enzyme localization on membranes

It is used for the treatment of paraffin embedded tissue sections to expose antigen binding sites for antibody labeling and for digestion of proteins from brain tissue samples for prions in Transmissible Spongiform Encephalopathies (TSE) research. Product P6556 is provided as a lyophilized powder. Product P6556 has been used to break down human lens protein.

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.

Conditionnement

5 mg in glass bottle

10, 25, 100, 500 mg in poly bottle

1 g in poly bottle

Actions biochimiques/physiologiques

Proteinase K has a broad specificity and degrades many proteins even in the native state. It mainly cleaves the peptide bond adjacent to the carboxyl group of aliphatic and aromatic amino acids with blocked α -amino groups. The optimum pH is between 7.5-9.0 and the isoelectric point is 8.9 Ca^{2+} (1-5 mM) is required for activation. Proteinase K is inhibited by diisopropyl fluorophosphate (DFIP), and phenylmethanesulfonyl fluoride (PMSF).

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 (Asp^{39} - His^{69} - Ser^{224}). 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 μ mole of tyrosine per min at pH 7.5 at 37 °C (color by Folin-Ciocalteu reagent).

PRODUITS APPARENTÉS

Souvent Commandé Avec Ce Produit

840857P

16:0-18:1 PA, 1-palmitoyl-2-oleoyl-*sn*-glycero-3-phosphate (sodium salt), powder

[View Pricing](#)

INFORMATIONS SUR LA SÉCURITÉ

Pictograms



GHS08

Mention d'avertissement

Danger

Mentions de danger

H315 - H319 - H334

Conseils de prudence

**P261 - P264 - P280 - P284 -
P302 + P352 - P305 + P351 +
P338**

Classification des risques

Eye Irrit. 2 - Resp. Sens. 1 -
Skin Irrit. 2

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

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)

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)

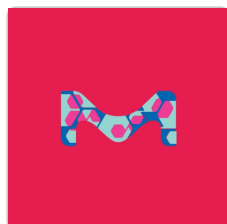
Rechercher

Plus De Documents

Enzyme Explorer

FDS

LES CLIENTS ONT ÉGALEMENT CONSULTÉ



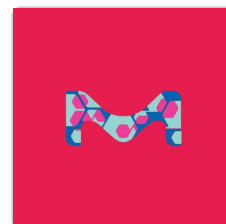
Sigma-Aldrich

1.07393

Proteinase K

(from *Tritirachium album*) solution in Tris/HCl pH 7.5;
0.01 mol/l; 600 mAnson-U/ml; for molecular biology EC...

[Consulter le prix et la disponibilité](#)



Sigma-Aldrich

539480

Proteinase K from *Tritirachium album*

[Consulter le prix et la disponibilité](#)

ARTICLES REVUS PAR DES PAIRS

Structure elucidation of a novel yellow chromophore from human lens protein.

Rongzhu Cheng et al.

The Journal of biological chemistry, 279(44), 45441-45449 (2004-08-19)

We report here the isolation of a novel acid-labile yellow chromophore from the enzymatic digest of human lens proteins and the identification of its chemical structure by liquid chromatography-mass spectrometry, liquid chromatography-tandem mass spectrometry, and (1)H, (13)C, and two-dimensional NMR.

Properties of a subtilisin-like proteinase from a psychrotrophic *Vibrio* species comparison with proteinase K and aqualysin I.

M M Kristjánsson et al.

European journal of biochemistry, 260(3), 752-760 (1999-04-02)

An extracellular serine proteinase purified from cultures of a psychrotrophic *Vibrio* species (strain PA-44) belongs to the proteinase K family of the superfamily of subtilisin-like proteinases. The enzyme is secreted as a 47-kDa protein, but under mild heat treatment (30

Stimulation of proteinase K action by denaturing agents: application to the isolation of nucleic acids and the degradation of 'masked' proteins.

H Hilz et al.

European journal of biochemistry, 56(1), 103-108 (1975-08-01)

Hydrolysis of serum albumin by proteinase K was strongly (greater than 7-fold) stimulated by urea and dodecylsulfate in a dose-dependent manner. With an oligopeptide as substrate, however, proteinase K was inactivated by dodecylsulfate. This indicates that the apparent activation of

FISHing for chick genes: Triple-label whole-mount fluorescence in situ hybridization detects simultaneous and overlapping gene expression in avian embryos.

Nathaniel Denkers et al.

Developmental dynamics : an official publication of the American Association of Anatomists, 229(3), 651-657 (2004-03-03)

Multi-color whole-mount in situ hybridization is a powerful technique for comparing the spatial expression patterns of two or more genes in developing embryos. We have developed an amplified triple-label whole-mount fluorescence in situ hybridization (FISH) protocol that permits detection of

Gonadotropin characterization, localization and expression in the European hake (*Merluccius merluccius*).

Michela Candelma et al.

Reproduction (Cambridge, England), 153(2), 123-132 (2016-11-03)

In vertebrates, the regulation of gametogenesis is under the control of gonadotropins (Gth), follicle-stimulating hormone (Fsh) and luteinizing hormone (Lh). In fish, the physiological role of Gths is not fully understood, especially in species with asynchronous ovarian development. To elucidate

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PROTOCOLES ET ARTICLES SCIENTIFIQUES

Articles

Enzymatic Assay of Proteinase K with Hemoglobin Substrate

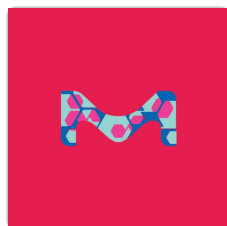
Proteinase K (EC 3.4.21.64) activity can be measured spectrophotometrically using hemoglobin as the substrate. Proteinase K hydrolyzes hemoglobin denatured with urea, and liberates Folin-positive amino acids and peptides. One unit will hydrolyze hemoglobin to produce color...

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-positive amino acids and peptides. One unit will hydrolyze hemoglobin to produce color...

PRODUITS CONSULTÉS RÉCEMMENT

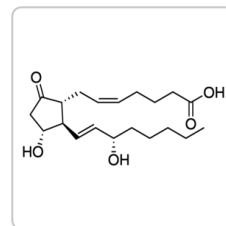


Sigma-Aldrich

P6534

Phospholipase A2 from porcine pancreas
ammonium sulfate suspension, ≥600 units/mg protein

[Consulter le prix et la disponibilité](#)



Sigma-Aldrich

P6532

Prostaglandin E2
γ-irradiated, powder, BioXtra, suitable for cell culture

[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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