

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



R5000 ▶ **Sigma-Aldrich®**

Ribonuclease A from bovine pancreas

★★★★★ (0)

Type II-A, $\geq 60\%$ (SDS-PAGE), ≥ 60 Kunitz units/mg protein

Synonyme(s):

Pancreatic Ribonuclease, RNaseA, RNase A, Ribonuclease 3'-pyrimidinoligonucleotidohydrolase

Numéro CAS: 9001-99-4

Numéro de classification
(Commission des enzymes): **3.1.27.5 (BRENDA, IUBMB)**

Numéro EC: **232-646-6**

Numéro MDL: **MFCD00132181**

NACRES: NA.54

Documents

↓ **FDS**

Q COO/COA

Fiche des caractéristiques

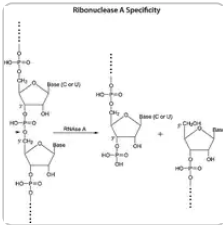
Plus de documents »

Référence	Conditionnement	Disponibilité		Prix	Quantité	
R5000-100MG	100 MG	✔️ Only 2 left in stock (more on the way)	Détails...	98,30 €	- +	📘
R5000-250MG	250 MG	✔️ Only 1 left in stock (more on the way)	Détails...	162,00 €	- +	📘
R5000-1G	1 G	✔️ Only 1 left in stock (more on the way)	Détails...	484,00 €	- +	📘

Demander une commande en gros

Ajouter au panier

PRODUITS RECOMMANDÉS



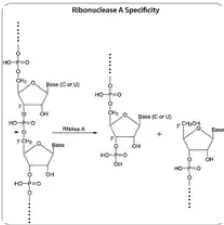
Sigma-Aldrich

R6513

Ribonuclease A from bovine pancreas

for molecular biology, ≥70 Kunitz units/mg protein, lyophilized

Consulter le prix et la disponibilité



Sigma-Aldrich

R4875

Ribonuclease A from bovine pancreas

Type I-A, powder, ≥60% RNase A basis (SDS-PAGE), ≥50 Kunitz units/mg protein

Consulter le prix et la disponibilité

PROPRIÉTÉS

Type	Type II-A
Niveau de qualité	300
Essai/Dosage	≥60% (SDS-PAGE)
Forme	solid
specific activity	>= 60 Kunitz units/mg protein
Poids mol.	~13,700
Impuretés	salt, essentially free

application(s)	diagnostic assay manufacturing
----------------	--------------------------------

Temp. de stockage	-20°C
-------------------	-------

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

Catégories apparentées

[Nucleases \(DNases and RNases\)](#)

DESCRIPTION

Description générale

RNase A, Ribonuclease A, is an endoribonuclease that cleaves the phosphodiester bonds of single strand RNA after pyrimidine nucleotides. It attacks at the 3' phosphate end (For example pG-pG-pC-pA-pG will be cleaved to give pG-pG-pCp and A-pG). The highest activity is exhibited with single stranded RNA. RNase A is a single chain polypeptide containing 4 disulfide bridges. In contrast to RNase B, it is not a glycoprotein. Ribonucleases do not hydrolyze DNA, because the DNA lacks 2'-OH groups essential for the formation of cyclic intermediates. RNase A can also hydrolyze RNA from protein samples. RNase A can be inhibited by alkylation of His12 and His119 and activated by potassium and sodium salts. RNase is inhibited in the presence of heavy metal ions. RNase is also inhibited competitively by DNA.

Ribonucleases do not hydrolyze DNA, because the DNA lacks 2'-OH groups essential for the formation of cyclic intermediates. RNase can hydrolyze RNA from protein samples. Pancreatic RNase A specifically cleaves at the 3'-side of pyrimidine (uracil or cytosine) phosphate bonds.

Application

- RNase A is used to remove RNA from DNA plasmid and genomic DNA preparations and protein samples.
- RNase A is also used in RNA sequence analysis and protection assays.

- RNase A has been used as a tool for computer-aided drug design.
- RNase A supports the analysis of RNA sequences.
- RNase A hydrolyze RNA contained in protein samples.
- Purification of DNA is supported by RNase A.

Ribonuclease A is used to remove RNA from DNA plasmid preparations and protein samples. Ribonuclease A is used for RNase protection assays, to remove unspecifically bound RNA, analysis of RNA sequences, to hydrolyze RNA contained in protein samples, and the purification of DNA. Ribonuclease A from bovine pancreas has been used in a study to assess hybridase activity of human ribonuclease-1. Ribonuclease A from bovine pancreas has also been used in a study to investigate particle-based and monolithic columns for cation exchange protein displacement chromatography.

Conditionnement

100, 250 mg in glass bottle

1 g in glass bottle

Caractéristiques et avantages

Our highly stable Ribonuclease A, RNase A, is suitable for removal of RNA, RNA sequencing, and DNA purification.

Notes préparatoires

Chromatographically purified

Remarque sur l'analyse

Protein determined by E.

RNase A purity determined by SDS-PAGE

PRODUITS APPARENTÉS

Application

796-0658

HPLC Analysis of Proteins on Discovery® BIO PolyMA-SCX (Analyte Set #2), application for HPLC

[View Pricing](#)

Inhibiteur

D5758

Diethyl pyrocarbonate, 96% (NT)

[View Pricing](#)

INFORMATIONS SUR LA SÉCURITÉ

Pictograms



GHS08

Mention d'avertissement

Danger

Mentions de danger

H334

Conseils de prudence

P261 - P284 - P501

Classification des risques

Resp. Sens. 1

Code de la classe de stockage

WGK

WGK 3

Flash Point(F)

Not applicable

11 - Combustible Solids

Point d'éclair C

Not applicable

Équipement de protection individuelle

Eyeshields, Gloves, type N95 (US)

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

R6000

Ribonuclease S from bovine pancreas

Grade XII-S

[Consulter le prix et la disponibilité](#)

Sigma-Aldrich

R7884

Ribonuclease B from bovine pancreas

BioReagent, ≥50 Kunitz units/mg protein, ≥80% (SDS-PAGE)

[Consulter le prix et la disponibilité](#)

ARTICLES REVUS PAR DES PAIRS

Investigation of particle-based and monolithic columns for cation exchange protein displacement chromatography using poly(diallyl-dimethylammonium chloride) as displacer.

Beata Schmidt et al.

Journal of chromatography. A, 1018(2), 155-167 (2003-11-19)

The overall topic of the investigation was the separation of basic proteins by cation exchange displacement chromatography. For this purpose two principal column morphologies were compared for the separation of ribonuclease A and alpha-chymotrypsinogen, two proteins found in the bovine

Low-dose rapamycin extends lifespan in a mouse model of mtDNA depletion syndrome.

Stephanie E Siegmund et al.

Human molecular genetics, 26(23), 4588-4605 (2017-10-04)

Mitochondrial disorders affecting oxidative phosphorylation (OxPhos) are caused by mutations in both the nuclear and mitochondrial genomes. One promising candidate for treatment is the drug rapamycin, which has been shown to extend lifespan in multiple animal models, and which was

1-Nitropyrene (1-NP) induces apoptosis and apparently a non-apoptotic programmed cell death (paraptosis) in Hepa1c1c7 cells.

Nana Asare et al.

Toxicology and applied pharmacology, 230(2), 175-186 (2008-04-18)

Mechanistic studies of nitro-PAHs (polycyclic aromatic hydrocarbons) of interest might help elucidate which chemical characteristics are most important in eliciting toxic effects. 1-Nitropyrene (1-NP) is the predominant nitrated PAH emitted in diesel exhaust. 1-NP-exposed Hepa1c1c7 cells exhibited marked changes in

Hybridase activity of human ribonuclease-1 revealed by a real-time fluorometric assay.

Nicoletta Potenza et al.

Nucleic acids research, 34(10), 2906-2913 (2006-06-02)

Human ribonuclease-1 (hRNase-1) is an extracellular enzyme found in exocrine pancreas, blood, milk, saliva, urine and seminal plasma, which has been implicated in digestion of dietary RNA and in antiviral host defense. The enzyme is characterized by a high catalytic

MASTL is essential for anaphase entry of proliferating primordial germ cells and establishment of female germ cells in mice.

Sanjiv Risal et al.

Cell discovery, 3, 16052-16052 (2017-02-23)

In mammals, primordial germ cells (PGCs) are the embryonic cell population that serve as germ cell precursors in both females and males. During mouse embryonic development, the majority of PGCs are arrested at the G2 phase when they migrate into

Afficher tous les articles scientifiques apparentés

PROTOCOLES ET ARTICLES SCIENTIFIQUES

Protocoles

Enzymatic Assay of Ribonuclease A (EC 3.1.27.5)

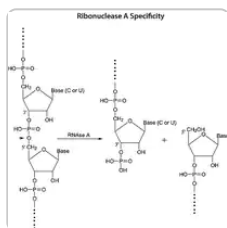
This procedure may be used for determination of Ribonuclease A (RNase A) activity.

Chromatograms

HPLC Analysis of Proteins on Discovery® BIO PolyMA-SCX (Analyte Set #2)

application for HPLC

PRODUITS CONSULTÉS RÉCEMMENT



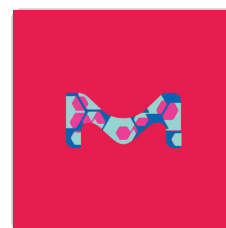
Sigma-Aldrich

R4875

Ribonuclease A from bovine pancreas

Type I-A, powder, ≥60% RNase A basis (SDS-PAGE),
≥50 Kunitz units/mg protein

[Consulter le prix et la disponibilité](#)



Sigma-Aldrich

R4877

Rennin from calf stomach

≥20 units/mg protein

[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

Le contenu de cette page vous a-t-il été utile ?*



Que pouvons-nous faire pour améliorer cette page spécifique de notre site Internet ?

Envoyer

© 2022 Merck KGaA, Darmstadt, Allemagne et/ou ses sociétés affiliées. Tous droits réservés.

La reproduction d'une quelconque partie du contenu de ce site est strictement interdite sans autorisation.

[Conditions d'utilisation du site](#) | [Politique de confidentialité](#) | [Conditions générales de vente](#) | [Consentement relatif au copyright](#) | [Paramètres des cookies](#)