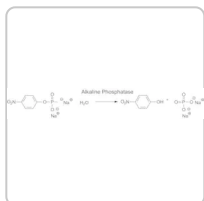


Saisir le nom du produit, le numéro de lot, etc.



Toutes les
photos (4)

Documents

FDS

COO/COA

 Fiche des
caractéristiques

Plus de
documents »

P7640 ► Sigma-Aldrich.

Phosphatase, Alkaline from bovine intestinal mucosa

★★★★★ (0)

lyophilized powder, ≥10 DEA units/mg solid

Synonyme(s):

Alkaline phosphatase, Orthophosphoric-monoester phosphohydrolase (alkaline optimum)

Numéro CAS: 9001-78-9

Numéro EC: 232-631-4

eCl@ss: 42010105

Numéro de classification
(Commission des enzymes):

3.1.3.1 (BRENDA, IUBMB)

Numéro MDL:

MFCD00131849

NACRES:

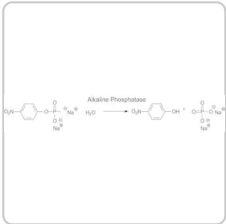
NA.54

Référence	Conditionnement	Disponibilité	Prix	Quantité
P7640-500MG	500 MG	✓ Only 4 left in stock (more on the way) Détails...	117,00 €	- +
P7640-1G	1 G	✓ Only 3 left in stock (more on the way) Détails...	211,00 €	- +
P7640-5G	5 G	✓ Only 4 left in stock (more on the way) Détails...	802,00 €	- +
P7640-10G	10 G	✓ Date d'expédition estimée le 21 octobre 2022	1260,00 €	- +

Demander une commande en gros

Ajouter au panier

PRODUITS RECOMMANDÉS

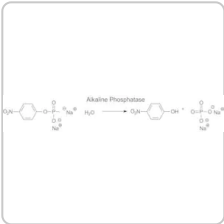


Sigma-Aldrich

P6774

Phosphatase, Alkaline from bovine intestinal mucosa
buffered aqueous solution, ≥2,000 DEA units/mg protein

[Consulter le prix et la disponibilité](#)



Sigma-Aldrich

P0114

Phosphatase, Alkaline from bovine intestinal mucosa
BioUltra, buffered aqueous glycerol solution, ≥5,700 DEA units/mg protein

[Consulter le prix et la disponibilité](#)

PROPRIÉTÉS

Source biologique	bovine intestinal mucosa
Niveau de qualité	200
Forme	lyophilized powder
specific activity	≥10 DEA units/mg solid
Poids mol.	dimer ~160 kDa
Expédié(e)s dans	wet ice

Temp. de stockage

-20°C

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

Catégories apparentées

[Detection Substrates & Enzymes](#)

DESCRIPTION

Application

Alkaline phosphatase can be used to dephosphorylate casein and other proteins. Alkaline phosphatase may be also be used to dephosphorylate the 5'-termini of DNA or RNA to prevent self-ligation. DNA or RNA can also be tagged with radiolabeled phosphate (via T4 polynucleotide kinase) after dephosphorylation with alkaline phosphatase..

Alkaline phosphatase is used for conjugation to antibodies and other proteins for ELISA, Western blotting, and histochemical detection. It is routinely used to dephosphorylate proteins and nucleic acids. It may be used for protein labeling when high sensitivity is required. Alkaline phosphatase may be also be used to dephosphorylate the 5'-termini of DNA or RNA to prevent self-ligation. DNA or RNA can also be tagged with radiolabeled phosphate (via T4 polynucleotide kinase) after dephosphorylation with alkaline phosphatase.. Product P7640 has been used to study the monoclonal alkaline phosphatase-anti-alkaline phosphatase (APAAP) complex.

High specific activity grade recommended for antibody and protein conjugation.

Conditionnement

500 mg in glass bottle

1, 5, 10 g in glass bottle

Actions biochimiques/physiologiques

Alkaline phosphatase, from bovine intestinal mucosa, is most stable in the pH range 7.5-9.5. The enzyme has a broad specificity for phosphate esters of alcohols, amines, pyrophosphate, and phenols and it requires zinc, and magnesium or calcium divalent ions for activity.

The enzyme has a broad specificity for phosphate esters of alcohols, amines, pyrophosphate, and phenols. It is routinely used to dephosphorylate proteins and nucleic acids.

Propriétés physiques

Bovine intestinal alkaline phosphatase is a dimeric, membrane-derived glycoprotein. At least three isoforms exist, which typically possess two N-linked and one or more O-linked glycans per monomer.

Bovine intestinal alkaline phosphatase is a dimeric, membrane-derived glycoprotein. At least three isoforms exist, which typically possess two N-linked and one or more O-linked glycans per monomer.² The enzyme requires zinc, and magnesium or calcium divalent ions for activity.

Définition de l'unité

One DEA unit will hydrolyze 1 μ mole of 4-nitrophenyl phosphate per minute at pH 9.8 at 37 °C. (One glycine unit is equivalent to ~3 DEA units)

Remarque sur l'analyse

Package sizes are based on DEA units

PRODUITS APPARENTÉS

Inhibiteur

D6518

Diethylenetriaminepentaacetic acid, ≥99% (titration)

[View Pricing](#)

P9375

1,10-Phenanthroline monohydrate, reagent grade

[View Pricing](#)

E4378

Ethylene glycol-bis(2-aminoethylether)-*N,N,N',N'*-tetraacetic acid, ≥97.0%

[View Pricing](#)

ED2SS

Ethylenediaminetetraacetic acid disodium salt dihydrate, reagent grade, 98.5-101.5% (titration)

[View Pricing](#)

Substrat

M3168

4-Methylumbelliferyl phosphate (4-MUP) Liquid Substrate System, liquid

[View Pricing](#)

N2770

SIGMAFAST™ p-Nitrophenyl phosphate Tablets, tablet, To prepare 20 mL

[View Pricing](#)**N1891**

SIGMAFAST™ p-Nitrophenyl phosphate Tablets, tablet, To prepare 5 mL

[View Pricing](#)**INFORMATIONS SUR LA SÉCURITÉ****Code de la classe de stockage**

13 - Non Combustible Solids

WGK

WGK 3

Flash Point(F)

Not applicable

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)

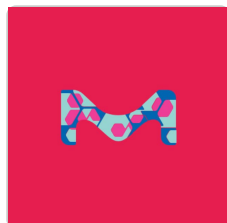
Rechercher

Plus De Documents

[Enzyme Explorer](#)

[FDS](#)

LES CLIENTS ONT ÉGALEMENT CONSULTÉ



Sigma-Aldrich

79390

Phosphatase, Alkaline from calf intestinal mucosa

suitable for enzyme immunoassay, solution (clear, colorless), ~2500 U/mg protein (~10 mg/ml)



Roche

10567752001

Alkaline Phosphatase

EIA grade, from calf intestine

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ARTICLES REVUS PAR DES PAIRS

Simultaneous flow-injection determination of fluoride, monofluorophosphate and orthophosphate ions using alkaline phosphatase immobilized on a cellulose nitrate membrane and an open-circulation approach.

Tzanavaras PD and Themelis DG

Analytica Chimica Acta, 467 (1-2), 83-89 (2002)

Monoclonal alkaline phosphatase-anti-alkaline phosphatase (APAAP) complex: production of antibody, optimization of activity, and use in immunostaining.

A Hohmann et al.

The journal of histochemistry and cytochemistry : official journal of the Histochemistry Society, 36(2), 137-143 (1988-02-01)

A mouse monoclonal antibody, FMC55 (an IgG1), to alkaline phosphatase was prepared and evaluated in immunostaining. Clones producing antibody to alkaline phosphatase were selected using a micro-ELISA which identified antibodies forming active soluble complexes (APAAP) with the enzyme. Conditions that

Ulvan-chitosan polyelectrolyte complexes as matrices for enzyme induced biomimetic mineralization.

Mamoni Dash et al.

Carbohydrate polymers, 182, 254-264 (2017-12-28)

Polyelectrolyte complexes (PEC) of chitosan and ulvan were fabricated to study alkaline phosphatase (ALP) mediated formation of apatitic minerals. Scaffolds of the PEC were subjected to ALP and successful mineral formation was studied using SEM, Raman and XRD techniques. Investigation

Electron Beam-Treated Enzymatically Mineralized Gelatin Hydrogels for Bone Tissue Engineering.

Stefanie Riedel et al.

Journal of functional biomaterials, 12(4) (2021-10-27)

Biological hydrogels are highly promising materials for bone tissue engineering (BTE) due to their high biocompatibility and biomimetic characteristics. However, for advanced and customized BTE, precise tools for material stabilization and tuning material properties are desired

while optimal mineralisation must

Intestinal alkaline phosphatase. Catalytic properties and half of the sites reactivity.

D Chappelet-Tordo et al.

Biochemistry, 13(9), 1788-1795 (1974-04-23)

[Afficher tous les articles scientifiques apparentés](#)

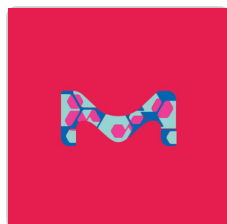
PROTOCOLES ET ARTICLES SCIENTIFIQUES

Protocoles

Diethanolamine Assay for the Enzymatic Assay of Alkaline Phosphatase (EC 3.1.3.1)

Enzymatic Assay of Alkaline Phosphatase, Diethanolamine Assay (EC 3. 1. 3. 1)

PRODUITS CONSULTÉS RÉCEMMENT



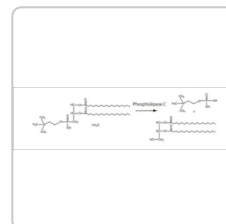
Sigma-Aldrich

P7634

3-Phosphoglyceric Phosphokinase from baker's yeast (*S. cerevisiae*)

ammonium sulfate suspension, ≥500 units/mg protein

[Consulter le prix et la disponibilité](#)



Sigma-Aldrich

P7633

Phospholipase C from *Clostridium perfringens* (*C. welchii*)

Type I, lyophilized powder, 10-50 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..

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