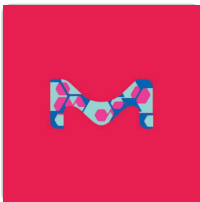




Saisir le nom du produit, le numéro de lot, etc.



Toutes les
photos (1)

Documents

↓ FDS

🔍 COO/COA

📄 Fiche des
caractéristiques

D4818 ▶ Sigma-Aldrich.

Dispase® I

★★★★★ (0)

protease

Synonyme(s):

Protease from *Bacillus polymyxa*

Numéro CAS: 42613-33-2

Numéro EC: 255-914-4

Numéro MDL: MFCD02253017

NACRES: NA.54

Référence	Conditionnement	Disponibilité	Prix	Quantité
D4818-2MG	2 MG	✓ Disponible pour expédition le 06 octobre 2022	216,00 €	– +

Détails...



Demander une commande en gros

Ajouter au panier

PRODUITS RECOMMANDÉS



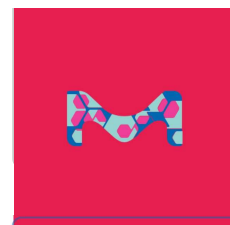
Roche



Sigma-Aldrich

**04942086001****Dispase® I (neutral protease, grade I)**

lyophilized, ≥10 units/mg protein (20 U/vial (37 °C, casein as substrate, pH 7.5)), optimum pH 6.0-8.5

[Consulter le prix et la disponibilité](#)**D4693****Dispase® II**

protease

[Consulter le prix et la disponibilité](#)

PROPRIÉTÉS

Niveau de qualité	200
-------------------	-----

Forme	lyophilized solid
-------	-------------------

specific activity	≥10 unit/mg solid
-------------------	-------------------

Temp. de stockage	2-8°C
-------------------	-------

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

Catégories apparentées

[Tissue Dissociation](#)

DESCRIPTION

Application

Dispase I has been used in a study to assess the effect of amniotic membrane on wound size in the early stages of the healing process. Dispase I has also been used in a study to investigate a dityrosine-based substrate for a protease assay.

Dispase I has been used in lung digestion and processing for flow staining, as well as for CD4 cell isolation in mice. The enzyme has also been used to digest excised wounds and a small amount of surrounding skin for the detection of GFP+ (green fluorescence protein) cells. This study investigated the effect of differentiation and angiogenesis of bone marrow-derived mesenchymal stem cells on wound healing. It has also been used to remove the epidermis during the isolation of dermal fibroblasts from mice.

Actions biochimiques/physiologiques

Dispase I is a rapid, effective, gentle and neutral protease that can separate intact epidermis from the dermis. It can also separate intact epithelial sheets in culture from the substratum. The enzyme preserves the viability of the epithelial cells while cleaving the basement membrane zone region. It can also be used to prevent clumping in suspension cultures. This protease cleaves fibronectin and type IV collagen, but not laminin, type V collagen, serum albumin, or transferrin. It hydrolyzes N-terminal peptide bonds of non-polar amino acid residues. It preferentially attacks denatured and intercellular proteins with exposed hydrophobic amino acid residues. Ca^{2+} , Mg^{2+} , Mn^{2+} , Fe^{2+} , Fe^{3+} and Al^{3+} activate the enzyme. EDTA, EGTA, Hg^{2+} and other heavy metals inhibit the enzyme activity. The enzyme contains 1g-atom of zinc per g-mol of purified enzyme. If this zinc component is removed by chelating agents such as EDTA or EGTA, an inactive apoenzyme is obtained. The enzyme is not inhibited by serum.

Définition de l'unité

One unit will hydrolyze casein to produce color equivalent to 1.0 μmole (181 μg) of tyrosine per min at pH 7.5 at 37 °C (color by Folin-Ciocalteu reagent), unless otherwise indicated.

Forme physique

lyophilized powder containing calcium acetate

Informations légales

Dispase is a registered trademark of Godo Shusei Co., Ltd.

INFORMATIONS SUR LA SÉCURITÉ

Pictograms



GHS07,GHS08

Mention d'avertissement

Danger

Mentions de danger

H315 - H319 - H334 - H335

Conseils de prudence

P261 - P264 - P271 - P280 -
P302 + P352 - P305 + P351 +
P338

Classification des risques

Eye Irrit. 2 - Resp. Sens. 1 -
Skin Irrit. 2 - STOT SE 3

Organes cibles

Respiratory system

Code de la classe de stockage

11 - Combustible Solids

WGK

WGK 3

Flash Point(F)

Not applicable

Point d'éclair C

Not applicable

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

LES CLIENTS ONT ÉGALEMENT CONSULTÉ

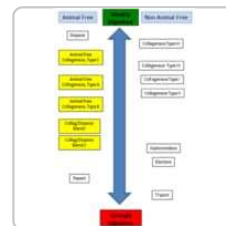


USP

1148089

Collagenase I

United States Pharmacopeia (USP) Reference Standard



Sigma-Aldrich

SCR139

Animal Free Collagenase/Dispase Blend I

Animal Free Collagenase/Dispase Blend I is a mixture of animal free collagenase, type B, and neutral...

[Consulter le prix et la disponibilité](#)

[Consulter le prix et la disponibilité](#)

QUESTIONS FRÉQUEMMENT POSÉES (FAQ)

Which document(s) contains shelf-life or expiration date information for a given product?

If available for a given product, the recommended re-test date or the expiration date can be found on the Certificate of Analysis.

How do I get lot-specific information or a Certificate of Analysis?

The lot specific COA document can be found by entering the lot number above under the "Documents" section.

At what concentration should Product D4818, Dispase, be used?

To dissociate cells from ECM (extracellular matrix) use at a concentration of 0.6 - 2.4 units/ml.

What is the activity of the Product D4818, Dispase, which I received?

Each lot will have a specific activity that can be found on our website on the certificate of analysis.

What is the difference between Product D4693, Dispase II and Product D4818, Dispase I?

Product D4693 is a lyophilized powder containing calcium acetate and milk sugar as a stabilizer. The activity specification is >0.5 unit/mg solid. Product D4818 does not contain any milk sugar and has an activity specification of >10 units/mg solid.

What is the solubility of Product D4818, Dispase I?

The enzyme may be reconstituted at 1 mg/ml in 10 mM sodium acetate buffer, pH 7.5 with 5 mM calcium acetate.

How do I find price and availability?

There are several ways to find pricing and availability for our products. Once you log onto our website, you will find the price and availability displayed on the product detail page. You can contact any of our Customer Sales and Service offices to receive a quote. USA customers: 1-800-325-3010 or view [local office numbers](#).

What is the Department of Transportation shipping information for this product?

Transportation information can be found in Section 14 of the product's (M)SDS. To access the shipping information for this material, use the link on the product detail page for the product.

My question is not addressed here, how can I contact Technical Service for assistance?

Ask a Scientist [here](#).

ARTICLES REVUS PAR DES PAIRS

[Self-renewal and expansion of single transplanted muscle stem cells.](#)

Alessandra Sacco et al.*Nature, 456(7221), 502-506 (2008-09-23)*

Adult muscle satellite cells have a principal role in postnatal skeletal muscle growth and regeneration. Satellite cells reside as quiescent cells underneath the basal lamina that surrounds muscle fibres and respond to damage by giving rise to transient amplifying cells

Reactivation of the Hedgehog pathway in esophageal progenitors turns on an embryonic-like program to initiate columnar metaplasia.

Alizée Vercauteren Drubbel et al.*Cell stem cell, 28(8), 1411-1427 (2021-04-22)*

Columnar metaplasia of the esophagus is the main risk factor for esophageal adenocarcinoma. There is a lack of evidence to demonstrate that esophageal progenitors can be the source of columnar metaplasia. In this study, using transgenic mouse models, lineage tracing

Mesenchymal stem cells enhance wound healing through differentiation and angiogenesis.

Yaojiong Wu et al.*Stem cells (Dayton, Ohio), 25(10), 2648-2659 (2007-07-07)*

Although chronic wounds are common, treatment for these disabling conditions remains limited and largely ineffective. In this study, we examined the benefit of bone marrow-derived mesenchymal stem cells (BM-MSCs) in wound healing. Using an excisional wound splinting model, we showed

Generation of four induced pluripotent stem cell lines, GZWWTi001-A, GZWTZi001-A, GZWXYi001-A, and GZWXDi001-A, derived from peripheral blood mononuclear cells from a family with asparagine synthetase deficiency.

Xie Yingjun et al.*Stem cell research, 41, 101583-101583 (2019-11-08)*

Asparagine synthetase (ASNS) deficiency (ASNSD; MIM #615574) is a rare neurodevelopmental disorder caused by mutations in the ASNS gene. The ASNS gene maps to cytogenetic band 7q21.3 and is 35 kb long. ASNSD is characterised by congenital microcephaly, severely delayed psychomotor

Analysis of allogenicity of mesenchymal stem cells in engraftment and wound healing in mice.

Liwen Chen et al.*PloS one, 4(9), e7119-e7119 (2009-09-23)*

Studies have shown that allogeneic (allo-) bone marrow derived mesenchymal stem cells (BM-MSCs) may enhance tissue repair/regeneration. However, recent studies suggest that immune rejection may occur to allo-MSCs leading to reduced engraftment. In this study, we compared allo-BM-MSCs with syngeneic

[Afficher tous les articles scientifiques apparentés](#)

PROTOCOLES ET ARTICLES SCIENTIFIQUES

Articles

[Tissue Dissociation Enzymes: Collagenase, Dispase, and Liberase](#)

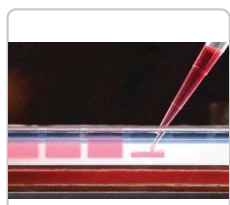
Enzyme Explorer Key Resource: Collagenase Guide. Collagenases, enzymes that break down the native collagen that holds animal tissues together, are made by a variety of microorganisms and by many different animal cells.

Contenu apparenté

[Tissue Dissociation Guide: Collagenase, Dispase, and Liberase Enzyme Types](#)

Collagenase Guide. Collagenases, enzymes that break down the native collagen that holds animal tissues together, are made by a variety of microorganisms and by many different animal cells.

PRODUITS CONSULTÉS RÉCEMMENT

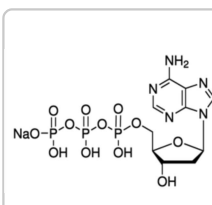


Sigma-Aldrich

D4813

Dendrotoxin-K

≥98% (HPLC), lyophilized powder



Sigma-Aldrich

D4788

2'-Deoxyadenosine 5'-triphosphate sodium salt solution

100 mM, pH 7

[Consulter le prix et la disponibilité](#)[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](#)