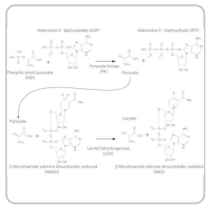
Brighten up your lab coat!
Subscribe to our scientific newsletters and make your lab mates jealous with a shiny 'Magical Flask' pin.
GET YOURS HERE

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



Toutes les photos (1)

Documents

- FDS
- COO/COA
- Fiche des caractéristiques

P0294 ▶ Sigma-Aldrich®

Pyruvate Kinase/Lactic Dehydrogenase enzymes from rabbit muscle

(0)

For the Determination of ADP, buffered aqueous glycerol solution

Synonyme(s):
PK/LDH enzymes from rabbit muscle

NACRES: NA.54

Référence	Conditionnement	Disponibilité		Prix	Quantité
P0294-5ML	5 ML	Only 3 left in stock (more on the way)	Détails...	196,00 €	− +
P0294-5X5ML	5 X 5 ML	Only 2 left in stock (more on the way)	Détails...	680,00 €	− +

Demander une commande en gros

Ajouter au panier

Brighten up your lab coat!
Subscribe to our scientific newsletters and make your lab mates jealous with a shiny 'Magical Flask' pin.

GET YOURS HERE

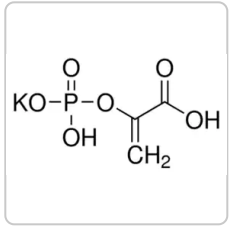
Sigma-Aldrich

P1506

Pyruvate Kinase from rabbit muscle

Type II, ammonium sulfate suspension, 350-600 units/mg protein

Consulter le prix et la disponibilité



Roche

10108294001

Phosphoenol-pyruvate

97% (PEP-K), pkg of 1 g

Consulter le prix et la disponibilité

PROPRIÉTÉS

Niveau de qualité	100
Forme	buffered aqueous glycerol solution
Poids mol.	59 kDa
Concentration	600-1,000 units/mL pyruvate kinase 900-1400 units/mL lactic dehydrogenase
Temp. de stockage	−20°C

Brighten up your lab coat!
Subscribe to our scientific newsletters and make your lab mates jealous with a shiny 'Magical Flask' pin.

GET YOURS HERE

Description générale

Pyruvate Kinase from rabbit muscle is a metalloenzyme which catalyzes the conversion of phosphoenol pyruvate to pyruvate in the glycolysis pathway. It corresponds to a molecular weight of 59 kDa. It exists as a tetramer and undergoes conformational changes in the active site to accommodate substrate. Lactic dehydrogenase (LDH) catalyzes the lactate to pyruvate conversion in anaerobic glycolysis. It exists as tetramer and comprises of two subunits (H and M). The LDH of eukaryotes undergo active-site loop gating for their catalytic functionality.

Application

Pyruvate Kinase/Lactic Dehydrogenase enzymes from rabbit muscle has been used:

- for ATP generation in the active microtubule preparation
- in the enzyme linked ATPase assay of skeletal muscle heavy meromyosin (HMM)
- as a standard control for quantifying mesenchymal stem cells (MSCs) lactate dehydrogenase

Actions biochimiques/physiologiques

ADP Quantification Assay protocol for the use of PK/LDH in the determination of ADP. Solutions containing unkown concentrations of ADP can be substuted for reagent D in this protocol. Further dilutions of the ADP solution may be required

Lactate dehydrogenase from rabbit muscle can be inhibited by ascorbate. Aldolase and actin were shown to block this inhibitory effect.

Pyruvate kinase also catalyzes the phosphorylation of thiamine diphosphate (TDP) to thiamine triphosphate (TTP) which may find application in antiviral and tumor therapy.

Pyruvate kinase requires bivalent and monovalent cations such as Mg^{2+} and K^{+} respectively for activation to occur.

Brighten up your lab coat!
Subscribe to our scientific newsletters and make your lab mates jealous with a shiny 'Magical Flask' pin.

GET YOURS HERE

Forme physique

Solution in 50% glycerol containing 10 mM HEPES, pH 7.0, 100 mM KCl and 0.1 mM EDTA

INFORMATIONS SUR LA SÉCURITÉ

Code de la classe de stockage
12 - Non Combustible Liquids

WGK
WGK 1

Flash Point(F)
Not applicable

Point d'éclair C
Not applicable

Équipement de protection individuelle
Eyeshields, Gloves, multi-purpose combination respirator cartridge (US)

DOCUMENTATION

Certificat d'analyse

Saisir un numéro de lot pour rechercher un certificat d'analyse (COA).

Numéro de lot

Brighten up your lab coat!
Subscribe to our scientific newsletters and make your lab mates jealous with a shiny 'Magical Flask' pin.

GET YOURS HERE

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

Roche

LLDH-RO
L-Lactate Dehydrogenase (L-LDH)

Consulter le prix et la disponibilité

Sigma-Aldrich

P1903
Pyruvate Kinase from *Bacillus stearothermophilus*
Type VIII, lyophilized powder, 100-300 units/mg protein

Consulter le prix et la disponibilité

Brighten up your lab coat!
Subscribe to our scientific newsletters and make your lab mates jealous with a shiny 'Magical Flask' pin.

GET YOURS HERE

Targeting Bcr-Abl by combining allosteric with ATP-binding-site inhibitors.

Jianming Zhang et al.
Nature, 463(7280), 501-506 (2010-01-15)

In an effort to find new pharmacological modalities to overcome resistance to ATP-binding-site inhibitors of Bcr-Abl, we recently reported the discovery of GNF-2, a selective allosteric Bcr-Abl inhibitor. Here, using solution NMR, X-ray crystallography, mutagenesis and hydrogen exchange mass spectrometry

---

The T790M mutation in EGFR kinase causes drug resistance by increasing the affinity for ATP.

Cai-Hong Yun et al.
Proceedings of the National Academy of Sciences of the United States of America, 105(6), 2070-2075 (2008-01-30)

Lung cancers caused by activating mutations in the epidermal growth factor receptor (EGFR) are initially responsive to small molecule tyrosine kinase inhibitors (TKIs), but the efficacy of these agents is often limited because of the emergence of drug resistance conferred

---

Ligand-Induced Domain Movement in Pyruvate Kinase: Structure of the Enzyme from Rabbit Muscle with Mg2+, K+, and l-Phospholactate at 2.7 AA Resolution

Larsen TM, et al.
Archives of Biochemistry and Biophysics, 345(2), 199-206 (1997)

Thermal activation of `allosteric-like?large-scale motions in a eukaryotic Lactate Dehydrogenase

Katava M, et al.
Scientific Reports, 7, 41092-41092 (2017)

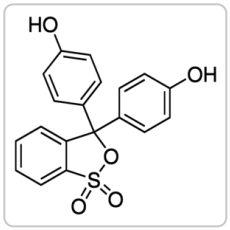
Chemical and enzymatic characterization of recombinant rabbit muscle pyruvate kinase

Boehme C, et al.
Biological Chemistry, 394(5), 695-701 (2013)

Afficher tous les articles scientifiques apparentés

Brighten up your lab coat!
Subscribe to our scientific newsletters and make your lab mates jealous with a shiny 'Magical Flask' pin.

GET YOURS HERE



Sigma-Aldrich

P0290

Phenol red solution

0.5%, liquid, sterile-filtered, BioReagent, suitable for cell culture

Consulter le prix et la disponibilité

Sigma-Aldrich

P0275

Poly(Glu, Tyr) sodium salt

Glu:Tyr (4:1), mol wt 20,000-50,000

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,

Brighten up your lab coat!
Subscribe to our scientific newsletters and make your lab mates jealous with a shiny 'Magical Flask' pin.

GET YOURS HERE

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**