CREATIVE BIOMART®
Assay Kit

Purine Nucleoside Phosphorylase Activity Colorimetric Assay Kit

Product Information

Cat

Kit-0711

Common Name

PNP

Cat.No. Kit-0711

Product Overview

Rapid, simple & convenient
Limit of quantification is 0.1 µU recombinant Purine Nucleoside Phosphorylase

Description

Purine Nucleoside Phosphorylase (PNP) (E.C. 2.4.2.1.) is an enzyme involved in purine metabolism and it catalyzes the cleavage of the glycosidic bond of ribo-or deoxyribonucleosides, in the presence of inorganic phosphate as a second substrate, to generate the purine base and ribose-1-phosphate or deoxyribose-1-phosphate. It is one of the enzymes of the nucleotide salvage pathways that allow the cell to produce nucleotide monophosphates when the de novo synthesis pathway has been interrupted or is non-existent (as is the case in the brain). PNP is a cytosolic enzyme. PNP deficiency disease leads to toxic buildup of deoxyguanosine in T-cells leading to T-lymphocytopenia with no apparent effects on B-lymphocyte function. Inhibition of PNP is an important target for chemotherapeutic applications and treatment of T-cell mediated autoimmune diseases. PNP deficiency is also associated with neurological problems. In Purine Nucleoside Phosphorylase Activity Assay, hypoxanthine formed by the breakdown of inosine is further converted to uric acid using a developer. The uric acid is measured at a wavelength of 293 nm. Limit of quantification is 0.1 µU recombinant Purine Nucleoside Phosphorylase.

Applications

Detection of Purine Nucleoside Phosphorylase activity in variety of samples

Usage

Tel: 1-631-559-9269 1-516-512-3133
Email:info@creative-biomart.org
Fax:1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

CREATIVE BIOMART®
Assay Kit

Purine Nucleoside Phosphorylase Activity Colorimetric Assay Kit

For Research Use Only! Not For Use in Humans.

Storage

-20°C

Size

100 assays

Kit Components

- PNP Assay Buffer (10x)
- Developer
- Inosine Substrate
- Hypoxanthine Standard (10 mM)
- PNP Positive Control
- U.V. transparent plate (96-well)

Detection method Absorbance (OD 293 nm)

Compatible Sample Types

- Purified recombinant protein
- Cell and tissue lysate

Tel: 1-631-559-9269 1-516-512-3133
Email:info@creative-biomart.org
Fax:1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA