Creative Enzymes®

Native Galactose-adapted yeast Uridine-5'-diphosphogalactose 4-epimerase

Cat. No. NATE-0275

Lot. No. (See product label)

Introduction

Description The enzyme UDP-glucose 4-epimerase (EC 5.1.3.2), also known as UDP-galactose 4-epimerase or GALE, is a homodimeric epimerase found in bacterial, fungal, plant, and mammalian cells. This enzyme performs the final step in the Leloir pathway of galactose metabolism, catalyzing the reversible conversion of UDP-galactose to UDP-glucose. GALE tightly binds nicotinamide adenine dinucleotide (NAD+), a co-factor required for catalytic activity.

Synonyms UDP-galactose 4-epimerase; uridine diphosphoglucose epimerase; galactowaldenase; UDPG-4-epimerase; uridine diphosphate galactose 4-epimerase; uridine diphospho-galactose-4-epimerase; UDP-glucose epimerase; UDP-galactose 4-epimerase; 4-epimerase; UDPG-4-epimerase; uridine diphosphoglucose 4-epimerase; uridine diphosphate glucose 4-epimerase; UDP-D-galactose 4-epimerase; EC 5.1.3.2; UDP-glucose 4-epimerase; GALE

Product Information

Source Galactose-adapted yeast

Form Lyophilized powder containing approx. 40% buffer salts

EC Number EC 5.1.3.2

CAS No. 9032-89-7

Activity 10-20 units/mg protein (modified Warburg-Christian)

Unit Definition One unit will convert 1.0 µmole UDP-galactose to Udp-glucose per min at pH 8.8 at 25°C. Contains approx. 0.4% galactokinase, and <0.2% UDPG-pyrophosphorylase, UDPG dehydrogenase and galactose-1-phosphate uridyl transferase.

Usage and Packaging

Package vial

Storage and Shipping Information

Storage −20°C