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