Creative Enzymes®

methylglyoxal reductase (NADPH)

Cat. No. EXWM-0191

Lot. No. (See product label)

Introduction

Description	The enzyme from the yeast Saccharomyces cerevisiae catalyses the reduction of a keto group in a number of compounds, forming enantiopure products. Among the substrates are methylglyoxal (which is reduced to (S)-lactaldehyde), 3-methylbutanal, hexane-2,5-dione and 3-chloro-1-phenylpropan-1-one. The enzyme differs from EC 1.1.1.78, methylglyoxal reductase (NADH), which is found in mammals, by its coenzyme requirement, reaction direction, and enantiomeric preference.
Synonyms	lactaldehyde dehydrogenase (NADP+); GRE2 (gene name); methylglyoxal reductase (NADPH-dependent); lactaldehyde:NADP+ oxidoreductase

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 1.1.1.283
CAS No.	78310-66-4
Reaction	(S)-lactaldehyde + NADP+ = 2-oxopropanal + NADPH + H+
Notes	This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

Storage and Shipping Information

Storage	Store it at +4 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.