Creative Enzymes®

Native Spinacia oleracea (Spinach) Ferredoxin-NADP+ Reductase

Cat. No. NATE-0256

Lot. No. (See product label)

Introduction

Description Ferredoxin-NADP+ reductase catalyzes the reversible conversion of reduced ferredoxin to oxidized ferredoxin during photosynthesis. Ferredoxin-NADP (H) reductase constitutes a family of hydrophilic FAD-containing monomeric enzymes that deliver NADPH or low potential one-electron donors to redox-based metabolisms in plastids, mitochondria, and bacteria.

Applications Ferredoxin-NADP+ Reductase was used in in vitro ferredoxin-dependent desaturation of fatty acids in cyanobacterial thylakoid membranes. It was also used to regulate glyceraldehyde-3-phosphate dehydrogenase.

Synonyms EC 1.18.1.2; ferredoxin-nicotinamide adenine dinucleotide phosphate reductase; ferredoxin-NADP+ reductase; TPNH-ferredoxin reductase; ferredoxin-NADP+oxidoreductase; NADP+:ferredoxin oxidoreductase; ferredoxin-TPN reductase; ferredoxin-NADP+-oxidoreductase; NADPH:ferredoxin oxidoreductase; ferredoxin-nicotinamide-adenine dinucleotide phosphate (oxidized) reductase; 9029-33-8; FNR

Product Information

Source Spinacia oleracea (Spinach)

Form lyophilized powder

EC Number EC 1.18.1.2

CAS No. 9029-33-8

Activity > 15 units/mg solid, secondary activity: > 10 units/mg solid NADPH diaphorase

Unit Definition One unit will reduce 1.0 millimole of cytochrome C per min at pH 7.5 at 25°C in the presence of spinach ferredoxin and NADP.

Storage and Shipping Information

Storage −20°C