Creative Enzymes®

Thioredoxin Reductase (NADPH) from Yeast, Recombinant

Cat. No. NATE-0917

Lot. No. (See product label)

Introduction

Description	Thioredoxin reductase (TrxR/NTR), an enzyme belonging to the flavoprotein family of pyridine nucleotide-disulfide oxidoreductases. Thioredoxin reductase (TrxR), a component of the thioredoxin system, including thioredoxin (Trx) and NADPH, catalyzes the transfer of electrons from NADPH to Trx, acts as a reductant of disulfide-containing proteins and participates in the defense system against oxidative stresses.
Synonyms	NADP-thioredoxin reductase; NADPH-thioredoxin reductase; thioredoxin reductase (NADPH); NADPH2:oxidized thioredoxin oxidoreductase; thioredoxin-disulfide reductase; NTR; TrxR

Product Information

Species	Yeast
Source	E. coli
Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
CAS No.	9074-14-0
Molecular Weight	36 kDa
Purity	Greater than 98.0% as determined by (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Activity	5 IU/mg
Buffer	Each mg of protein contains 20mM phosphate buffer pH 7.4 and 0.15M sodium chloride.
Unit Definition	One unit equals the change in absorbance at 412 nm per minute at 25°C using 0.2mM NADPH containing 5mM DTNB (pH 7.0).

Storage and Shipping Information

Stability	NTR although stable at 4°C for 3 weeks, should be stored desiccated below -18°C. Please prevent freeze thaw cycles.