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.