

## 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.