

# **California Bioscience**

# **Product Datasheet**

Product Name	Thioredoxin Reductase (NADPH) Yeast Recombinant
Cata No	CB500457
Source	Escherichia Coli.
Synonyms	Thioredoxin Reductase (NADPH), NTR, TrxR.

## 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.

Thioredoxin Reductase (NADPH) Yeast Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain having a molecular mass of 36 kDa.

Thioredoxin Reductase is purified by proprietary chromatographic techniques.

#### **Physical Appearance**

Sterile Filtered White lyophilized (freeze-dried) powder.

#### **Biological Activity**

The specific activity was found to be 5 IU/mg.

#### Purity

Greater than 98.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.

# Formulation

Each mg of protein contains 20mM phosphate buffer pH 7.4 and 0.15M sodium chloride.

## Stability

NTR although stable at  $4^{\circ}$  for 3 weeks, should be stored desiccated below -18°C.

Please prevent freeze thaw cycles.