

Product datasheet

Recombinant *S. cerevisiae* Thioredoxin / TRX protein
ab82731

1 Image

Description

Product name	Recombinant <i>S. cerevisiae</i> Thioredoxin / TRX protein
Biological activity	Specific activity : 32.7 U/mg. One unit will cause a ΔA_{650} of 1.0 in 1min at 25°C in the insulin reduction assay.
Purity	> 95 % SDS-PAGE.
Expression system	Escherichia coli
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Saccharomyces cerevisiae

Specifications

Our [Abpromise guarantee](#) covers the use of **ab82731** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Functional Studies SDS-PAGE
Form	Lyophilized

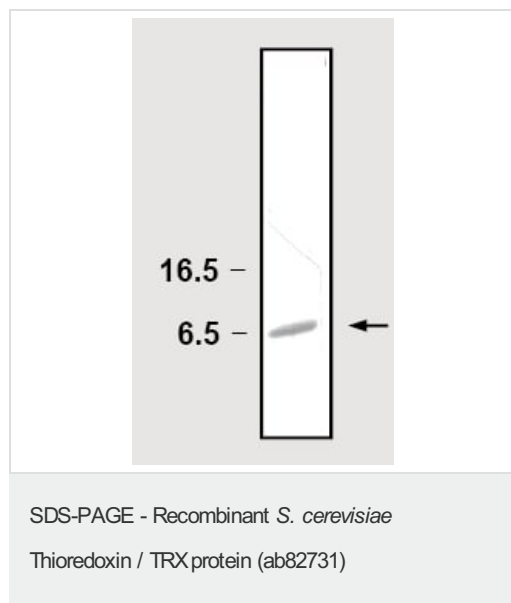
Preparation and Storage

Stability and Storage	Shipped at 4°C. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle. Constituent: 0.476% HEPES This product is an active protein and may elicit a biological response in vivo, handle with caution.
Reconstitution	Reconstitute in 20mM HEPES pH 7.0, Packaging size : 0.5 mg

General Info

Function	Participates in various redox reactions through the reversible oxidation of its active center dithiol to a disulfide and catalyzes dithiol-disulfide exchange reactions. Plays a role in the reversible S-nitrosylation of cysteine residues in target proteins, and thereby contributes to the response to intracellular nitric oxide. Nitrosylates the active site Cys of CASP3 in response to nitric oxide (NO), and thereby inhibits caspase-3 activity. Induces the FOS/JUN AP-1 DNA-binding activity in ionizing radiation (IR) cells through its oxidation/reduction status and stimulates AP-1 transcriptional activity. ADF augments the expression of the interleukin-2 receptor TAC (IL2R/P55).
Sequence similarities	Belongs to the thioredoxin family. Contains 1 thioredoxin domain.
Post-translational modifications	In the fully reduced protein, both Cys-69 and Cys-73 are nitrosylated in response to nitric oxide (NO). When two disulfide bonds are present in the protein, only Cys-73 is nitrosylated. Cys-73 can serve as donor for nitrosylation of target proteins. In case of infection, ubiquitinated by <i>S.typhimurium</i> protein slrP, leading to its degradation.
Cellular localization	Nucleus. Cytoplasm. Secreted. Secreted by a leaderless secretory pathway. Predominantly in the cytoplasm in non irradiated cells. Radiation induces translocation of TRX from the cytoplasm to the nucleus.

Images



ab82731 at 1µg on SDS-PAGE.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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