# abcam

# Product datasheet

# Recombinant human Thioredoxin / TRX protein (Active) ab51064

6 References 画像数 2

製品の詳細

製品名 Recombinant human Thioredoxin / TRX protein (Active)

生理活性 Specific activity is >150 A650/cm/min/mg, obtained by measuring the increase of insulin

precipitation in absorbance at 650 nm resulting from the reduction of insulin.

精製度 > 95 % SDS-PAGE.

Recombinant human Thioredoxin / TRX was overexpressed in E. coli and purified by using

conventional chromatography techniques.

発現系 Escherichia coli

アクセッション番号 <u>P10599</u>

タンパク質長 Full length protein

Animal free No

由来 Recombinant

生物種 Human

配列 MVKQIESKTA FQEALDAAGD KLVVVDFSAT

WCGPCKMIKP FFHSLSEKYS NVIFLEVDVD DCQDVASECE VKCMPTFQFF KKGQKVGEFS

GANKEKLEAT INELV

**予測される分子量** 12 kDa

**領域** 1 to 105

**配列の追加情報** (NP\_003320)

特性

Our **Abpromise guarantee** covers the use of **ab51064** in the following tested applications.

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

アプリケーション Western blot

Functional Studies

SDS-PAGE

製品の状態 Liquid

備考 MW confirmed by MALDI-TOF.

Concentration determined by BCA assay.

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### 前処理および保存

#### 保存方法および安定性

Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

pH: 7.40

Constituent: PBS

This product is an active protein and may elicit a biological response in vivo, handle with caution.

#### 関連情報

# 機能

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

ADF augments the expression of the interleukin-2 receptor TAC (IL2R/P55).

#### 配列類似性

Belongs to the thioredoxin family. Contains 1 thioredoxin domain.

transcriptional activity.

#### 翻訳後修飾

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.

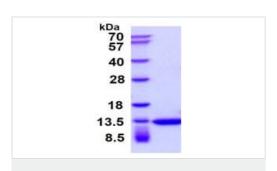
In case of infection, ubiquitinated by S.typhimurium protein slrP, leading to its degradation.

#### 細胞内局在

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

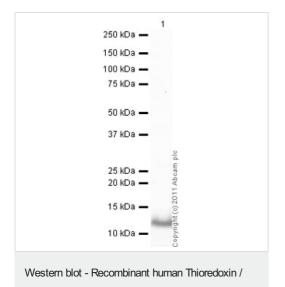
the nucleus.

#### 画像



SDS-PAGE - Recombinant human Thioredoxin / TRX protein (ab51064)

3 ug of reduced ab51064, on 15% SDS-PAGE, stained with Coomassie Blue.



Anti-Thioredoxin / TRX antibody (ab26320) at 1  $\mu$ g/ml + Recombinant human Thioredoxin / TRX protein (Active) (ab51064) at 0.01  $\mu$ g

# **Secondary**

Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Exposure time: 30 seconds

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

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TRX protein (ab51064)

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