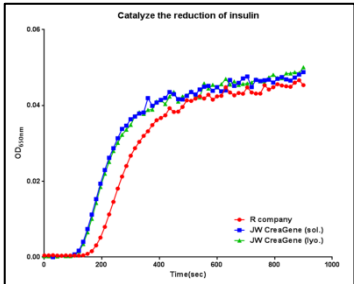


## DATA SHEET

### Product Information

<b>Product Name</b>	: <b>Recombinant Human Thioredoxin1 (rhTRX1)</b>
<b>Synonyms</b>	: TXN, TRDX, TRX, TRX1, thioredoxin
<b>Description</b>	: Thioredoxins are proteins that act as antioxidants by facilitating the reduction of other proteins by cysteine thiol-disulfide exchange. Thioredoxins are found in nearly all known organisms and are essential for life in mammals. Thioredoxin is a 12-kD oxidoreductase enzyme containing a dithiol-disulfide active site. It is ubiquitous and found in many organisms from plants and bacteria to mammals. Two cysteines, CXXC motif, are the key to the ability of thioredoxin to reduce other proteins. Thioredoxin proteins also have a characteristic tertiary structure termed the thioredoxin fold. (Ref. From Wikipedia)
<b>NCBI Accession No.</b>	: NM_003329.3
<b>Amino acid sequence</b>	: <b>MVKQIESKTAFQEALDAAGDKLVVDFSATWCGPCKMIKPFHSLSEKYSNV IFLEVDVDDCQDVASECEVVKCMPTFQFFKKGQKVGFEFSGANKEKLEATINEL V*</b>
<b>Molecular Mass</b>	: 11.71 kDa (105 aa)
<b>Protein Tags</b>	: No tagging
<b>Source</b>	: <i>E. coli</i> .
<b>Cat. No.</b>	: HTRX-500, HTRX-1000
<b>Storage</b>	: Should be at $\leq -70$ °C as undiluted aliquots of handy size. Avoid repeated freezing and thawing.
<b>Cross Reactivity</b>	: Human, Mouse, Pig, Rabbit, Rat, Sheep, Chicken

### Quality Control

Test items	Specifications
<b>Appearance</b>	: Clear, colorless liquid
<b>Purity</b>	: Greater than 95 % by SDS-PAGE
<b>Specificity</b>	: Using Western blot, detection
<b>Concentration</b>	: 0.1 mg/ml, Bradford method  Measured by its ability to catalyze the reduction of insulin. The reaction leads to precipitation, which can be measured by absorbance at 650nm. The specific activity is >10 A650/min/mg
<b>Biological Activity</b>	: 
<b>Endotoxin</b>	: Less than 0.2 EU/ $\mu$ g as determined by the LAL method
<b>Formulation</b>	: PBS, 0.1mM DTT (pH7.4) without preservative or carrier proteins.
<b>Stability</b>	: Stable for up to 12 months at -70 °C. Stable for a month at 4 °C.
<b>Sterility</b>	: Sterilized through a 0.2 $\mu$ m membrane filter and packaged aseptically. Culture for 2 weeks, no growth

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