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PRODUCT SPECIFICATION

Product No.	TRX-04
Product description:	Human Mutant C61S/C72S Thioredoxin 1
Lot No.	01
Specifications:	<p>Recombinant mutant human C61S/C72S Trx1, 250 µg, in 180 µl was lyophilized from 50 mM Tris-HCl, pH 7.5 – 1 mM EDTA. This is a mutant form of human thioredoxin, which lacks the structural cysteine residues C61 and C72, which are responsible for oxidative inactivation and dimer formation. The active site: C31 and C34.</p> <p>Use: Reconstitute with 100 µl H₂O. This gives a solution of 210 µM thioredoxin. The protein may partly be oxidized and can be reactivated by addition of a 5-fold molar excess of DTT or by use of Reductacryl® reagent (Calbiochem).</p>
Reference:	Ren, X. et al. (1998) Biochemistry 32, 9701-9708.
Storage:	Keep at +4°C
Examples of use:	Activity can be measured with the thioredoxin-dependent reduction of insulin using recombinant rat thioredoxin reductase (Product No TR-03). The test mixture should contain 160 µM insulin and 0.2 mM NADPH in 0.1 M potassium phosphate, 2mM EDTA, pH 7.0. In the presence of 5 µM human mutant C61S/C72S thioredoxin 1, 7 nM of mammalian thioredoxin reductase will give a decrease of absorbtion at 340 nm of 0.100 min ⁻¹ .

NOTE! Make sure to reconstitute all of the lyophilized protein in the ampoule. After adding buffer, close the screw-cap again, shake vigorously, then centrifuge shortly, in order to recover liquid from tube cap and walls.