

Recombinant Human Thioredoxin-2 / TXN2 Protein (His tag)

Cat.NO.: TP05602

3th Edition

Synonyms:MT-TRX;MTRX;RP5-1119A7. 13-005;TRX2

Description:Thioredoxin-2, also known as TXN2, MTRX and TRX2, is a member of the thioredoxin family. Tryparedoxins (TXN) are thioredoxin-related proteins which, as trypanothione:peroxiredoxin oxidoreductases, constitute the trypanothione-dependent antioxidant defense and may also serve as substrates for ribonucleotide reductase in trypanosomatids. Thioredoxin-2 / TXN2 contains one thioredoxin domain. It is widely expressed in adult (at protein level) and fetal tissues. Human Thioredoxin-2 / TXN2 is a small redox protein important in cellular antioxidant defenses, as well as in the regulation of apoptosis. Thioredoxin-2 / TXN2 has an anti-apoptotic function and plays an important role in the regulation of mitochondrial membrane potential. Thioredoxin-2 / TXN2 could be involved in the resistance to anti-tumor agents. It possesses a dithiol-reducing activity. Thioredoxin-2 / TXN2 plays an important role in protecting the mitochondria against oxidative stress and in sensitizing the cells to ROS-induced apoptosis. Mammalian Thioredoxin-2 / TXN2 is a mitochondrial isoform of highly evolutionary conserved thioredoxins. Thioredoxins are small ubiquitous protein-disulfide oxidoreductases implicated in a large variety of biological functions.

Form:PBS

Molecular Weight:13.4 kDa

Sequences:Thr 60-Gly 166

Purity:> 95% by HPLC

Concentration:

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.