Human/Mouse/Rat Thioredoxin-2
Alexa Fluor® 488-conjugated Antibody

Monoclonal Mouse IgG_1 Clone # 543317

Catalog Number: FAB5765G

100 µg

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse and rat Thioredoxin-2 in Western blots.
Source	Monoclonal Mouse IgG_1 Clone # 543317
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant human Thioredoxin-2 Thr60-Gly166 Accession # Q99757
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

Western Blot	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Thioredoxin-2 (Trx-2; also known as mitochondrial Thioredoxin) belongs to the evolutionarily conserved Thioredoxin family of proteins. Thioredoxins share the Thioredoxin fold containing the active site-CGPC motif. In their reduced form, the active site cysteine residues reduce protein disulfides. The resulting active site disulfide is subsequently reduced in a reaction catalyzed by a NADPH-dependent Thioredoxin reductase. Thioredoxin-2 contains an N-terminal 59 amino acid (aa) transit sequence that is cleaved upon translocation to mitochondria. The amino acid sequence of mature human Thioredoxin-2 is 98% identical to mouse and rat Thioredoxin-2. Thioredoxin-2 interacts with specific components of the mitochondrial respiratory chain and helps regulate the membrane potential. Thioredoxin-2 is ubiquitously but variably expressed and high expression confers resistance to oxidant-induced apoptosis.

PRODUCT SPECIFIC NOTICES

Bio-Techne®
Global | bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL: 1.612.379.2956
USA | TEL: 800.343.7475 Canada | TEL: 855.668.8722 Europe | Middle East | Africa TEL: +44.0.1235.529449
China | info.cn@bio-techne.com TEL: 400.821.3475