**BACKGROUND**

Rhodanese (also known as thiosulfate sulfurtransferase) is a mitochondrial matrix enzyme that is encoded by the nucleus. Rhodanese is a 297-residue polypeptide and has been proposed to play roles in cyanide detoxification, the formation of iron-sulfur proteins, and the modification of sulfur-containing enzymes. Rhodanese was first identified in human red cells in 1956 and has been crystallized from beef liver. In mammals, most cyanide is converted to thiocyanate by Rhodanese. There is an association between Leber’s optic neuropathy and deficiency of Rhodanese activity in liver and rectal mucosa. Greatly reduced activity of this enzyme has been observed in the livers of two males with Leber optic atrophy from a well-studied Swiss family with five symptomatic persons in four generations. The red cell and tissue Rhodanese are determined by separate genes, but more than one locus may be concerned with the synthesis of heterogeneous tissue isozymes. The gene which encodes rhodanese maps to human chromosome 22q12.3.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: TST (human) mapping to 22q12.3.

**SOURCE**

Rhodanese (E-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 29-117 near the N-terminus of Rhodanese of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**STORAGE**

Store at 4°C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**APPLICATIONS**

Rhodanese (E-11) is recommended for detection of Rhodanese of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Rhodanese siRNA (h): sc-36418, Rhodanese shRNA Plasmid (h): sc-36418-SH and Rhodanese shRNA (h) Lentiviral Particles: sc-36418-V.

Molecular Weight of Rhodanese: 33-35 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, COLO 205 whole cell lysate: sc-364177 or human liver extract: sc-363766.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

**DATA**

[Images of Western blots showing Rhodanese expression in different samples.]

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.