



▶ Metallothionein (1-61): sc-4293

BACKGROUND

Metallothionein (MT) is a sulfhydryl- and cysteine-rich protein found in microorganisms, plants and all invertebrate and vertebrate animals. Metallothioneins are a group of ubiquitous low-molecular-weight proteins that have functional roles in cell growth, repair and differentiation. Metallothioneins are implicated primarily in metal ion detoxification, in that they are essential for the protection of cells against the toxicity of cadmium, mercury and copper. Metallothionein, as an acute phase or stress-response protein and free radical scavenger, is related to inflammation and cellular protection from reactive forms of oxygen, ionizing radiation, pharmacological agents and mutagens. Metallothioneins are known to be broadly expressed in heart, liver, kidney, breast, and testis tissue.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: MT1/MT2 (human) mapping to 16q13; Mt1/Mt2 (mouse) mapping to 8 C5.

SOURCE

Metallothionein (1-61) is expressed in *E. coli* as a 34 kDa tagged fusion protein corresponding to amino acids 1-61 representing full length Metallothionein of human origin.

STORAGE

Store at -20° C; stable for one year from the date of shipment.

PRODUCT

Metallothionein (1-61) is purified from bacterial lysates (> 98%) by glutathione agarose chromatography and supplied as 50 µg purified protein in PBS containing 5 mM DTT and 50% glycerol.

APPLICATIONS

Metallothionein (1-61) is suitable as a Western Blotting control.

RESEARCH USE

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

PROTOCOLS

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