**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**


**SOURCE**

Metallothionein (FL-61) is a rabbit polyclonal antibody raised against amino acids 1-61 representing full length Metallothionein of human origin.

**PRODUCT**

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

Metallothionein (FL-61) is recommended for detection of all Metallothionein isoforms of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Metallothionein (FL-61) is also recommended for detection of all Metallothionein isoforms in additional species, including equine, canine, bovine and porcine.

Molecular Weight of Metallothionein polymerized forms: 15-42 kDa.

Positive Controls: mouse heart extract: sc-2254 or rat heart extract: sc-2393.

**STORAGE**

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

**RESEARCH USE**

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

**SELECT PRODUCT CITATIONS**


**PROTOCOLS**

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