

For research use only

Heavy metal detoxification and Oxidative stress Anti Metallothionein Monoclonal Antibody (Clone No.1A12)

Metallothinein(MT), a cysteine-rich(30%), metal-binding protein, exists in most tissues and is easily induced by many stimuli. It's multifunction roles in the body have been proposed such as a chelator to harmful heavy metals and excessive essential metals, a scavenger to various radicals and active oxygen species, and a regulator in the cell proliferation process.

This product consists of protein G purified mouse monoclonal antibody against rabbit MT-2 and can be used for immunoblotting. This antibody reacts with rabbit MT-1,2, human MT-1, mouse MT-1 and rat MT-1.

Package Size $100 \mu g (100 \mu L/vial)$

Format Mouse monoclonal antibody 1.0mg/mL

Buffer 2% Block Ace as a stabilizer, containing 0.1% proclin as a bacteriostat

Storage Store below -20° C.

Once thawed, store at 4°C. Repeated freeze-thaw cycles should be avoided.

Purification method The splenic lymphocytes from BALB/c mouse, immunized with rabbit

metallothionein-2, were fused to myeloma P3U1 cells. The cell line (1A12) with positive reaction was grown in ascitic fluid of BALB/c mouse, from which the

antibody was purified by Protein G affinity chromatography.

Working dilution for immunoblotting: 0.01μ g/mL

Specificity This antibody reacts with rabbit MT-1,2, human MT-1, mouse MT-1 and rat MT-1

[References]

- 1. Yasutake A, et al.(1998): Induction by Mercury Compounds of Brain Metallothionein in Rats:Hgo Exposure Induces Long-lived Brain Metallothionein. *Arch Toxcol*.vol.72,No4, 187-191
- Mullins JE, et al.(1998): Immunohistochemical Detection of Metallothionein in Liver, Duodenum and Kidney after Dietary Copper-Overload in Rats. Histol Histopathol. vol. 13, No. 3, 627-633
- **3.** Kikuchi Y, et al,(1993): Induction of Metallothionein in a Human Astrocytoma Cell Line by Interleukin-1 and heavy Metals . *FFBS Lett.*,vol.317,No1-2, 22-26
- 4. M.Nordberg.(1998): Metallothionein: historical review and state of knowledge. Talanta 46(2), 243-254
- 5. Akintola DF, et al.(1995): Development of an enzyme-linked immunosorbent assay for human metallothionein-1 in plasma and urine. J.Lab.126(2) 119-127

Supplier



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