

# MTF1 Antibody (monoclonal) (M06)

Mouse monoclonal antibody raised against a partial recombinant MTF1. Catalog # AT2926a

#### **Product Information**

Application WB, E
Primary Accession Q14872
Other Accession NM\_005955
Reactivity Human
Host mouse
Clonality monoclonal
Isotype IgG2a Kappa
Clone Names 3G12

Clone Names 3G12 Calculated MW 80957

### **Additional Information**

**Gene ID** 4520

Other Names Metal regulatory transcription factor 1, MRE-binding transcription factor,

Transcription factor MTF-1, MTF1

**Target/Specificity** MTF1 (NP\_005946, 41 a.a. ~ 140 a.a) partial recombinant protein with GST tag.

MW of the GST tag alone is 26 KDa.

**Dilution** WB~~1:500~1000 E~~N/A

**Format** Clear, colorless solution in phosphate buffered saline, pH 7.2.

**Storage** Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

**Precautions** MTF1 Antibody (monoclonal) (M06) is for research use only and not for use in

diagnostic or therapeutic procedures.

# **Background**

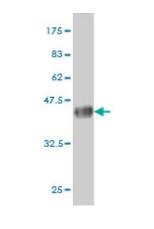
This gene encodes a transcription factor that induces expression of metallothioneins and other genes involved in metal homeostasis in response to heavy metals such as cadmium, zinc, copper, and silver. The protein is a nucleocytoplasmic shuttling protein that accumulates in the nucleus upon heavy metal exposure and binds to promoters containing a metal-responsive element (MRE).

### References

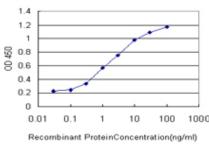
Divalent metal-dependent regulation of hepcidin expression by MTF-1. Balesaria S, et al. FEBS Lett, 2010 Feb 19. PMID 20026331.Loss of liver-intestine cadherin in human intrahepatic cholangiocarcinoma promotes

angiogenesis by up-regulating metal-responsive transcription factor-1 and placental growth factor. Takamura M, et al. Int J Oncol, 2010 Jan. PMID 19956853.Metal transcription factor-1 regulation via MREs in the transcribed regions of selenoprotein H and other metal-responsive genes. Stoytcheva ZR, et al. Biochim Biophys Acta, 2010 Mar. PMID 19913599.Metal-responsive transcription factor 1 (MTF-1) activity is regulated by a nonconventional nuclear localization signal and a metal-responsive transactivation domain. Lindert U, et al. Mol Cell Biol, 2009 Dec. PMID 19797083.Polymorphisms of DNA damage response genes in radiation-related and sporadic papillary thyroid carcinoma. Akulevich NM, et al. Endocr Relat Cancer, 2009 Jun. PMID 19286843.

## **Images**



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.74 KDa).



Detection limit for recombinant GST tagged MTF1 is approximately 0.03ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.