10320 Camino Santa Fe, Suite G
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MTF-1 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58078

Specification

MTF-1 Polyclonal Antibody - Product Information

Application	**IHC-P, IHC-F, IF, E**
Primary Accession	Q14872
Reactivity	**Rat, Pig, Dog, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**81 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from human MTF-1**
Epitope Specificity	**101-200/753**
Isotype	**IgG**

Purity
affinity purified by Protein A

Buffer	**0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.**
SUBCELLULAR LOCATION	**Nucleus.**
SIMILARITY	**Contains 6 C2H2-type zinc fingers.**
Important Note	**This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.**

Background Descriptions
The zinc finger transcription factor MTF-1 (metal-responsive transcription factor-1) is conserved from insects to vertebrates. The major role of MTF-1 in both organisms is to control the transcription of genes involved in the homeostasis and detoxification of heavy metal ions such as Cu2+, Zn2+ and Cd2+. In mammals, MTF-1 serves at least two additional roles. First, targeted disruption of the MTF-1 gene results in death at embryonic day 14 due to liver degeneration, revealing a stage-specific developmental role. Second, under hypoxic-anoxic stress, MTF-1 helps to activate the transcription of the gene placental growth factor (PIGF), an angiogenic protein.

MTF-1 Polyclonal Antibody - Additional Information

Gene ID 4520

Other Names
Metal regulatory transcription factor 1, MRE-binding transcription factor, Transcription factor MTF-1, MTF1

Dilution
IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>E~~N/A

Format
0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage
Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ℃.

MTF-1 Polyclonal Antibody - Protein Information

Name MTF1

Function
Zinc-dependent transcriptional regulator of cellular adaption to conditions of exposure to heavy metals (PubMed:8065932). Binds to metal responsive elements (MRE) in promoters and activates the transcription of metallothionein genes like metallothionein-2/MT2A (PubMed:8065932). Also regulates the expression of metalloproteases in response to intracellular zinc and functions as a catabolic regulator of cartilages (By similarity).

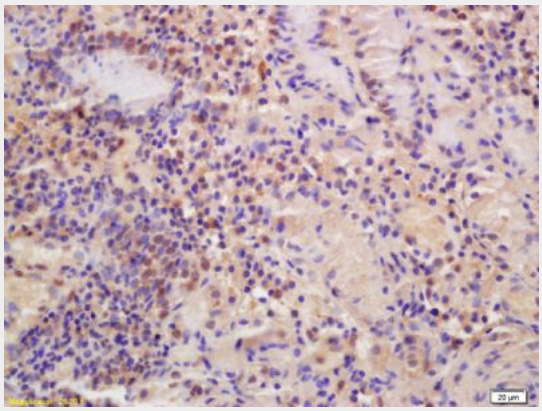
Cellular Location
Nucleus. Cytoplasm {ECO:0000250|UniProtKB:Q07243}. Note=Translocation to the nucleus is induced by metals. {ECO:0000250|UniProtKB:Q07243}

MTF-1 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MTF-1 Polyclonal Antibody - Images



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Tissue/cell: human gastric carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;
Incubation: Anti-MTF-1 Polyclonal Antibody, Unconjugated(bs-3601R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining