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MTF-1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58078

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q14872
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	80957
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.

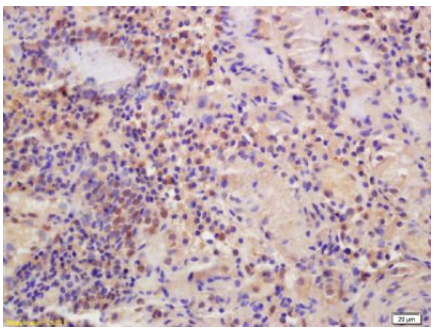
Additional Information

Gene ID	4520
Other Names	Metal regulatory transcription factor 1, MRE-binding transcription factor, Transcription factor MTF-1, MTF1
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C 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 °C.

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}

Images



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(AP58078) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining