

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human MTF2 in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human MTF2 Asn356-Ser554 Accession # Q9Y483
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Immunohistochemistry Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

MTF2 (Metal-response element-binding transcription factor 2; also M96, ZIRF1 and PCL2) is a 67 kDa member of the polycomb group of proteins. It appears to participate in the activities of at least two complexes, PRC1 (Polycomb repressive complex 1) and PRC2. In general, the PRC complexes are repressive. In stem cells, MTF2/PRC2 inhibits expression of pluripotency factors such as KLF4 and Tbx3, likely by recruiting the full PRC2 complex to target gene promoters. And during AP specification of the axis, MTF2, as part of both a PRC1 and PRC2 complex, blocks Hox gene expression. Human MTF2 is 593 amino acids (aa) in length. It contains one Tudor domain (aa 40-91), two PHD-type Zn-finger regions (aa 102-157 and 201-255) and three utilized phosphorylation sites at Ser24, 27 and 488. There are multiple potential splice variants. One is 60 kDa in size and shows a deletion of aa 331-387, while a second is 55 kDa in size and possesses an alternative start site at Met103. A third contains a combination of the above, a fourth possesses a 34 aa substitution for aa 1-307, and a fifth utilizes an alternative start site at Met332. Over aa 356-554, human MTF2 shares 94% aa identity with mouse MTF2.

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