

DESCRIPTION

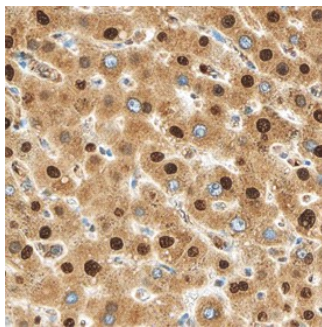
Species Reactivity	Human
Specificity	Detects human MTF2 in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human MTF2 Asn356-Ser554 Accession # Q9Y483
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

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.

	Recommended Concentration	Sample
Immunohistochemistry	5-15 µg/mL	See Below

DATA

Immunohistochemistry
 <p>MTF2 in Human Liver. MTF2 was detected in immersion fixed paraffin-embedded sections of human liver using Sheep Anti-Human MTF2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6846) at 3 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to nuclei in hepatocytes. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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.