

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human and mouse MSX1 in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human MSX1 Met1-Thr165 Accession # P28360
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
Western Blot	0.1 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

DATA

<p>Western Blot</p> <p>Detection of Human MSX1 by Western Blot. Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line. Gels were loaded with 30 µg of whole cell lysate (WCL), 20 µg of cytoplasmic (Cyto), and 10 µg of nuclear extracts (Nuc). PVDF membrane was probed with 0.1 µg/mL Goat Anti-Human/Mouse MSX1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5045) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band for MSX1 was detected at approximately 40 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunohistochemistry</p> <p>MSX1 in Human Ovarian Cancer Tissue. MSX1 was detected in immersion fixed paraffin-embedded sections of human ovarian cancer tissue using Goat Anti-Human/Mouse MSX1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5045) at 0.3, 1.0 and 3.0 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to nuclei. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
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

MSX1 (Msh homeobox homology 1) is a member of the muscle segment homeobox gene family. MSX1 is involved in limb-pattern formation, craniofacial development, odontogenesis, and tumor growth inhibition. MSX1 functions as a transcriptional repressor. MSX1 has been shown to interact with the linker histone, H1B, and repress transcription of the MyoD promoter. Chromosomal abnormalities involving MSX1 have been associated with the Wolf-Hirschhorn syndrome characterized by heart defects and mental retardation.