

DESCRIPTION

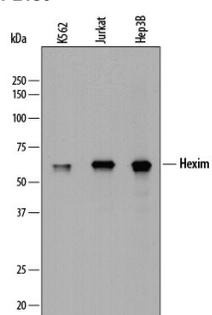
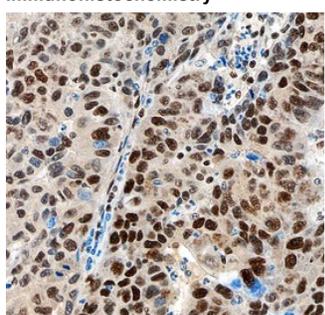
Species Reactivity	Human
Specificity	Detects human Hexim 1 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human Hexim 2 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Hexim 1 His213-Asp359 Accession # O94992
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	1 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human Hexim 1 by Western Blot. Western blot shows lysates of K562 human chronic myelogenous leukemia cell line, Jurkat human acute T cell leukemia cell line, and Hep3B human hepatocellular carcinoma cell line. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human Hexim 1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8106) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Hexim 1 at approximately 60 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunohistochemistry</p>  <p>Hexim 1 in Human Liver. Hexim 1 was detected in immersion fixed paraffin-embedded sections of human liver using Sheep Anti-Human Hexim 1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8106) at 1 µg/mL overnight at 4 °C. 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. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>
--	---

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

Hexim 1, also known as CLP1, EDG1, HIS1, and MAQ1, is an approximately 60 kDa transcriptional regulator that binds double stranded RNA and inhibits RNA polymerase II. Hexim 1 plays an important role in many processes including satellite muscle cell regeneration, cardiovascular development, and HIV-1 replication. It can form homodimers and heterodimers with Hexim 2, and its activity is regulated by phosphorylation at Ser158. Hexim 1 inhibits the kinase activity of the elongation factor P-TEFb. This inhibition can be relieved by Hexim 1 interaction with Nucleophosmin or by cellular exposure to hexamethylene bisacetamide. Hexim 1 inhibits the transactivation function of the glucocorticoid, estrogen, and androgen receptors. It can inhibit the cellular response to hypoxia and promote cancer progression or, alternatively, can inhibit VEGF mediated angiogenesis and suppress metastasis. Within aa 213-359, human Hexim 1 shares 95% and 94% aa sequence identity with mouse and rat Hexim 1, respectively.