

DESCRIPTION

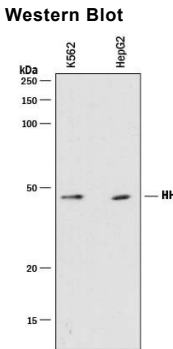
Species Reactivity	Human
Specificity	Detects human HHEX in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 906705
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human HHEX Thr111-Gly270 Accession # Q03014
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied 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.

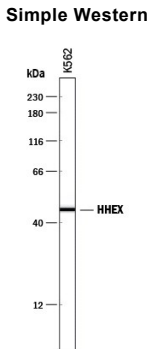
	Recommended Concentration	Sample
Western Blot	2 µg/mL	See Below
Simple Western	20 µg/mL	See Below

DATA




Western Blot

Detection of Human HHEX by Western Blot. Western blot shows lysates of K562 human chronic myelogenous leukemia cell line and HepG2 human hepatocellular carcinoma cell line. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human HHEX Monoclonal Antibody (Catalog # MAB8377) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for HHEX at approximately 37 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.



Simple Western

Detection of Human HHEX by Simple Western™. Simple Western lane view shows lysates of K562 human chronic myelogenous leukemia cell line, loaded at 0.5 mg/mL. A specific band was detected for HHEX at approximately 47 kDa (as indicated) using 20 µg/mL of Mouse Anti-Human HHEX Monoclonal Antibody (Catalog # MAB8377). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 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

Hematopoietically-expressed homeobox protein (HHEX), also known as HEX, PRH and PRHX, is a 35-40 kDa member of the Homeobox family of transcription factors. Family members are distinguished by an evolutionarily conserved DNA-binding homeodomain of 60 amino acids (aa), which for HHEX spans aa 137-196. Human HHEX was initially isolated from hematopoietic tissue, and is present in several hematopoietic progenitors, where its expression is down-regulated during terminal cell differentiation. HHEX is also expressed in the anterior visceral endoderm during early mouse development, and in some adult tissues of endodermal origin, including liver, lung and thyroid. HHEX knockout in mice is embryonic lethal, with impaired forebrain, liver and thyroid development. Human HHEX is 270 aa in length, and over aa 111-270, shares 93% and 95% identity with mouse and rat HHEX, respectively.