

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human EMX2 in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human EMX2 Asn49-Ser143 Accession # Q04743
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.

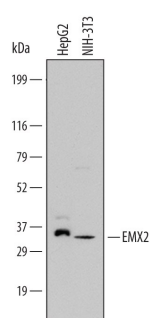
APPLICATIONS

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	Immersion fixed paraffin-embedded sections of uterus

DATA

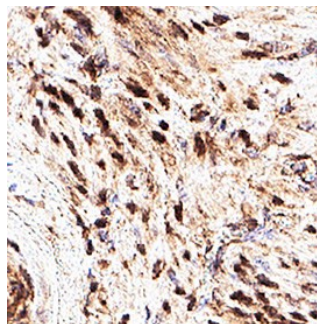
Western Blot



Detection of Human and Mouse EMX2 by Western Blot.

Western blot shows lysates of HepG2 human hepatocellular carcinoma cell line and NIH-3T3 mouse embryonic fibroblast cell line. PVDF Membrane was probed with 1 µg/mL of Human EMX2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6470) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for EMX2 at approximately 33 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry



Detection of EMX2 in Uterus.

EMX2 was detected in immersion fixed paraffin-embedded sections of uterus using Sheep Anti-Human/Mouse EMX2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6470) at 1 µg/ml overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). 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 nucleus. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

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.
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

EMX-2 (also Empty spiracles homolog 2) is a 30-33 kDa member of the EMX homeobox family of molecules. It is expressed in embryonic neural stem and progenitor cells, and promotes their commitment to a neuronal phenotype. In a more global sense, it also promotes the formation of networks that favor visual sensation. In the adult, EMX-2 is found in neural stem cells where it acts to maintain a pool of available stem cells. Human EMX-2 is 252 amino acids (aa) in length. It contains one poly-Ala region (aa 54-59) and a DNA-binding homeobox domain (aa 154-213). There is one potential splice variant that shows a 33 aa substitution for aa 137-252. Over aa 59-143, human EMX-2 shares 98% aa identity with mouse EMX-2.