

DESCRIPTION

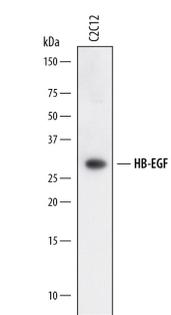
Species Reactivity	Mouse
Specificity	Detects mouse HB-EGF in direct ELISAs and Western Blots. In direct ELISAs, less than 30% cross-reactivity with recombinant human HB-EGF is observed and less than 2% cross-reactivity with recombinant mouse Amphiregulin is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse HB-EGF Asp63-Leu148 Accession # Q06186
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
Immunohistochemistry	5-15 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Mouse HB-EGF by Western Blot. Western blot shows lysates of C2C12 mouse myoblast cell line. PVDF membrane was probed with 2 µg/mL of Sheep Anti-Mouse HB-EGF Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8239) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for HB-EGF at approximately 28 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunohistochemistry</p>  <p>HB-EGF in Mouse Embryo. HB-EGF was detected in immersion fixed frozen sections of mouse embryo (15 d.p.c.) using Sheep Anti-Mouse HB-EGF Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8239) at 15 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 developing central nervous system. View our protocol for Chromogenic IHC Staining of Frozen 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

Heparin-binding EGF-like growth factor, HB-EGF, is a 19-23 kDa glycoprotein, member of the EGF family of mitogens that exists in multiple forms as a result of heterogenous O-glycosylation. HB-EGF is a growth factor that mediates its effects via EGFR, ERBB2 and ERBB4. It is required for normal cardiac valve formation and normal heart function and promotes smooth muscle cell proliferation. HB-EGF may be involved in macrophage-mediated cellular proliferation. The cDNA for mouse Proheparin-binding EGF-like growth factor encodes a 208 amino acid residue transmembrane protein that is proteolytically cleaved to generate the soluble HB-EGF. Like EGF, TGF-α, and AR, HB-EGF binds to the EGF receptor and activates the receptor tyrosine kinase. It has been suggested that the differential activities found for HB-EGF compared to EGF may be mediated by the heparin-binding properties of HB-EGF.