

DESCRIPTION

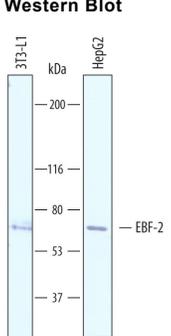
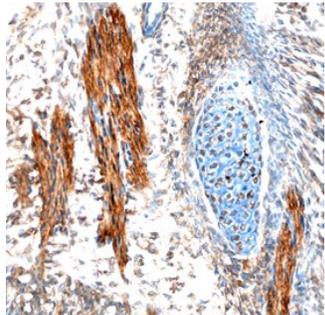
Species Reactivity	Human/Mouse
Specificity	Detects mouse EBF-2 in direct ELISAs. Detects mouse and human EBF-2 in Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant mouse (rm) EBF-1 and rmEBF-3 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse EBF-2 Arg407-Ser519 Accession # O08792
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	1 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human and Mouse EBF-2 by Western Blot. Western blot shows lysates of 3T3-L1 mouse embryonic fibroblast adipose-like cell line and HepG2 human hepatocellular carcinoma cell line. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human/Mouse EBF-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7006) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for EBF-2 at approximately 65 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.</p>	<p>Immunohistochemistry</p>  <p>EBF-2 in Mouse Embryo. EBF-2 was detected in immersion fixed frozen sections of mouse embryo (15 d.p.c.) using Sheep Anti-Mouse EBF-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7006) at 10 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 muscle cells. View our protocol for Chromogenic IHC Staining of Frozen Tissue Sections.</p>
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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. *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

EBF-2 (Early B cell Factor 2; also Mmot1, OLF3 and COE2) is a 62 kDa (predicted) member of the COE family of transcription factors. It is expressed in immature osteoblasts and Purkinje cells, and in the embryo is associated with the migration of postmitotic neuroblasts. In immature osteoblasts, EBF-2 appears to upregulate OPG, suppressing osteoclast formation. And in the developing retina, EBF-2 is found in ganglion, glycinergic Amacrine and horizontal cells, possibly promoting their development over that of photoreceptor cells. Mouse EBF-2 is 575 amino acids (aa) in length. It contains one DNA-binding region with an embedded C5-type zinc-finger motif (aa 62-238), a dimerization ITP/TIG domain (aa 253-336), and a Pro/Ser-rich transactivation domain (aa 453-534). Although considered an HLH type transcription factor, it does not contain the typical "b", or basic amino acid sequence associated with bHLH factors. EBF-2 both homodimerizes, and heterodimerizes with EBF-1 and -3. There is an alternative start site at Met23. Over aa 407-519, mouse EBF-2 is identical in aa sequence to rat EBF-2 and shares 99% aa identity with human EBF-2.