

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human FABP5/E-FABP in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 30% cross-reactivity with recombinant mouse (rm) FABP5 is observed and less than 5% cross-reactivity with recombinant human FABP1, -2, -3, -4, -6, -7, and rmFABP9 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human FABP5/E-FABP Ala2-Glu135 Accession # Q01469
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.

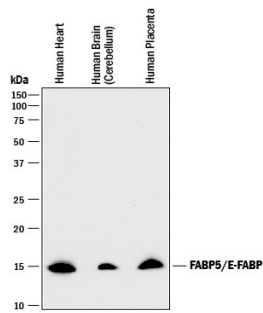
APPLICATIONS

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
Immunocytochemistry	5-15 µg/mL	See Below
Simple Western	10-12.5 µg/mL	See Below
Knockout Validated	FABP5/E-FABP is specifically detected in HeLa human cervical epithelial carcinoma parental cell line but is not detectable in FABP5/E-FABP knockout HeLa cell line.	

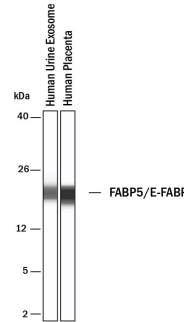
DATA

Western Blot



Detection of Human FABP5/E-FABP by Western Blot. Western blot shows lysates of human heart tissue, human brain (cerebellum) tissue, and human placenta tissue. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human FABP5/E-FABP Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3077) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for FABP5/E-FABP at approximately 15 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

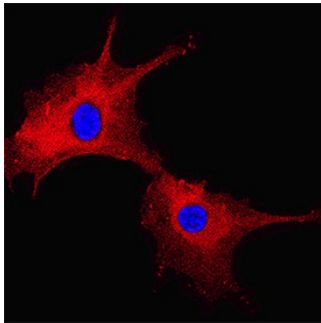
Simple Western



Detection of Human FABP5/E-FABP by Simple Western™. Simple Western lane view shows lysates of Exosome Standards (Human Urine) (Catalog # NBP2-49840) and human placenta tissue, loaded at 0.5 mg/mL. A specific band was detected for FABP5/E-FABP at approximately 20 kDa (as indicated) using 10 µg/mL of Goat Anti-Human FABP5/E-FABP Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3077) followed by HRP-conjugated Donkey Anti-Goat Secondary Antibody (Catalog # 042-206). This experiment was conducted under reducing conditions and using the 2-40kDa separation system.

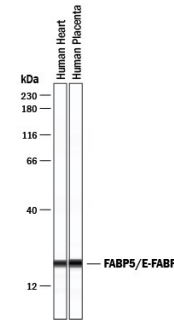


Immunocytochemistry



FABP5/E-FABP in HUVEC Human Umbilical Vein Endothelial Cells. FABP5/E-FABP was detected in immersion fixed HUVEC human umbilical vein endothelial cells using Goat Anti-Human FABP5/E-FABP Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3077) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for Fluorescent ICC Staining of Non-adherent Cells.

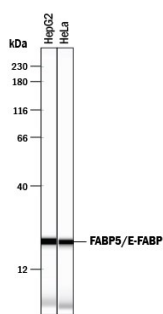
Simple Western



Detection of Human FABP5/E-FABP by Simple Western™. Simple Western lane view shows lysates of human heart tissue and human placenta tissue, loaded at 0.2 mg/mL. A specific band was detected for FABP5/E-FABP at approximately 21 kDa (as indicated) using 10 µg/mL of Goat Anti-Human FABP5/E-FABP Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3077) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



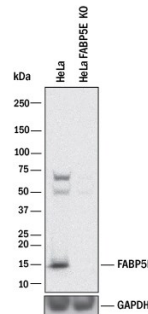
Simple Western



Detection of Human FABP5/E-FABP by Simple Western™. Simple Western lane view shows lysates of HepG2 human hepatocellular carcinoma cell line and HeLa human cervical epithelial carcinoma cell line, loaded at 0.2 mg/mL. A specific band was detected for FABP5/E-FABP at approximately 21 kDa (as indicated) using 12.5 µg/mL of Goat Anti-Human FABP5/E-FABP Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3077) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



Knockout Validated



Western Blot Shows Human FABP5/E-FABP Specificity by Using Knockout Cell Line. Western blot shows lysates of HeLa human cervical epithelial carcinoma parental cell line and FABP5/E-FABP knockout HeLa cell line (KO). PVDF membrane was probed with 1 µg/mL of Goat Anti-Human FABP5/E-FABP Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3077) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for FABP5/E-FABP at approximately 15 kDa (as indicated) in the parental HeLa cell line, but is not detectable in knockout HeLa cell line. GAPDH (Catalog # Catalog # AF5718) is shown as a loading control. This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS. For liquid material, refer to CoA for concentration.
Shipping	Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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

Human FABP-5, also known as epidermal fatty acid binding protein (E-FABP), is a 15 kDa member of a cytosolic fatty acid binding protein superfamily. It is associated with keratinocytes and adipocytes and is suggested to promote fatty acid availability to enzymes, protect cell structures from fatty acid attack, and target fatty acids to nuclear transcription factors. The amino acid sequence of human FABP5 is 80%, 81% and 92% identical to that of mouse, rat and bovine FABP5, respectively.