Human FABP5/E-FABP Antibody

Monoclonal Rat IgG_{2A} Clone # 311215

Catalog Number: MAB3077

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human FABP5/E-FABP in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human FABP1, 2, 3, 4, 6, 7, or 9 is observed.
Source	Monoclonal Rat IgG_{2A} Clone # 311215
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-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.

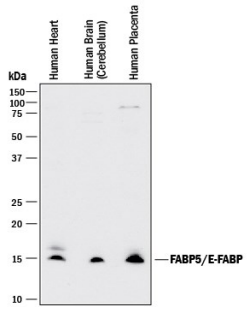
APPLICATIONS

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
Flow Cytometry	0.25 µg/10^6 cells	HUVEC human umbilical vein endothelial cells
Immunocytochemistry	8-25 µg/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	
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.	

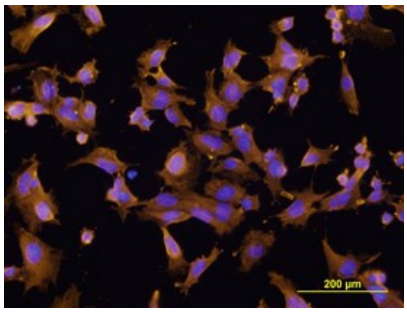
DATA

Western Blot



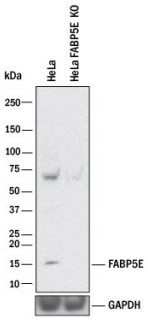
Detection of Human FABP5/E-FABP by Western Blot. Western blot shows lysates of human heart tissue, human brain (cerebellum) tissue, and human placenta tissue. PVDF membrane was probed with 1 µg/mL of Rat Anti-Human FABP5/E-FABP Monoclonal Antibody (Catalog # MAB3077) followed by HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # Catalog # HAF005). 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.

Immunocytochemistry



FABP5 in HUVEC Human Cells. FABP5 was detected in immersion fixed HUVEC human umbilical vein endothelial cells using Rat Anti-Human FABP5 Monoclonal Antibody (Catalog # MAB3077) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the Northern-Lights™ 557-con-jugated Anti-Rat IgG Secondary Antibody (yellow; Catalog # Catalog # NL013) and counter-stained with DAPI (blue). View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

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 Rat Anti-Human FABP5/E-FABP Monoclonal Antibody (Catalog # MAB3077) followed by HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # Catalog # HAF005). 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 # MAB5718) is shown as a loading control. This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

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Human FABP5/E-FABP Antibody

Monoclonal Rat IgG_{2A} Clone # 311215

Catalog Number: MAB3077

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.** • 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

FABP5, also known as epidermal fatty acid binding protein (E-FABP), is expressed in skin, lens, adipose tissue, endothelial cells, heart, brain and placenta. FABP-5 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. Human FABP-5 shares 80%, 81%, and 92% aa identity with mouse, rat and bovine FABP-5, respectively.

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