BACKGROUND

The fatty acid binding protein (FABP) family of cytoplasmic hydrophobic ligand binding proteins influence lipid metabolism by binding and transporting long-chain fatty acids. Ileal lipid binding protein (ILBP) is a cytosolic ileocyte FABP that binds to both bile acids and fatty acids thereby mediating active uptake of bile acid in the ileum. Transport of bile acids from the liver is essential for the solubilization and transport of dietary lipids. ILBP contains ten antiparallel \( \beta \) strands arranged in two nearly orthogonal \( \beta \) sheets (\( \beta \) clam shell), covered on one side by two short, nearly parallel \( \alpha \) helices. Binding of fatty acids or bile acids to ILBP alters the side-chain proton resonances of amino acids within the protein cavity and increases the affinity of ILBP for bile acids; bile acid binding to ILBP is a positive-feedback regulation mechanism. The human ILBP gene maps to position 5q33.3, with transcript being abundant in the small intestine.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: FABP6 (human) mapping to 5q33.3; Fabp6 (mouse) mapping to 11 B1.1.

SOURCE

ILBP (E-9) is a mouse monoclonal antibody raised against amino acids 1-128 representing full length ILBP of human origin.

PRODUCT

Each vial contains 200 µg IgG, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ILBP (E-9) is available conjugated to agarose (sc-515609 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515609 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515609 PE), fluorescein (sc-515609 FITC), Alexa Fluor® 488 (sc-515609 AF488), Alexa Fluor® 546 (sc-515609 AF546), Alexa Fluor® 594 (sc-515609 AF594) or Alexa Fluor® 647 (sc-515609 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515609 AF680) or Alexa Fluor® 790 (sc-515609 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

For research use only, not for use in diagnostic procedures.