FABP4
Recombinant Human Fatty Acid binding protein 4

Catalog No.	CRF118A	**Quantity:**	2 µg
	CRF118B		10 µg
	CRF118C		1.0 mg

Alternate Names: Fatty acid-binding protein adipocyte, AFABP, Fatty acid-binding protein 4, Adipocyte lipid-binding protein, ALBP, A-FABP, FABP4.

Description: Adipocyte fatty acid binding protein FABP4 is a 15 kDa member of the intracellular fatty acid binding protein (FABP) family, which is known for the ability to bind fatty acids and related compounds (bile acids or retinoids) in an internal cavity. FABP4 is expressed in a differentiation-dependent fashion in adipocytes and is a critical gene in the regulation of the biological function of these cells. In mice, targeted mutations in FABP4 provide significant protection from hyperinsulinemia and insulin resistance in the context of both dietary and genetic obesity. Adipocytes obtained from FABP4-deficient mice also have reduced efficiency of ipolysis in vitro and in vivo, and these mice exhibited moderately improved systemic dyslipidemia. Recent studies also demonstrated FABP4 expression in macrophages upon differentiation and activation. In these cells, FABP4 modulates inflammatory responses and cholesterol ester accumulation, and total or macrophage-specific FABP4 deficiency confers dramatic protection against atherosclerosis in the apoE-/- mice. These results indicate a central role for FABP4 in the development of major components of the metabolic syndrome through its distinct actions in adipocytes and macrophages.

GeneID: 2167

Source: *E. coli*

Molecular Weight: 14.7 kDa

Formulation: Sterile filtered and lyophilized from 0.5 mg/ml in 0.05 M Acetate buffer, pH 4.

Purity: Greater than 90% as determined by SDS-PAGE.

Specificity: The amino acid sequence of the recombinant human FABP4 is 100% homologous to the amino acid sequence of the human FABP4.

Solubility: 0.1M Acetate buffer pH4 and let the lyophilized pellet dissolve completely. For conversion into higher pH value, we recommend intensive dilution by relevant buffer to a concentration of 10µg/ml. In higher concentrations the solubility of this antigen is limited.

Purification Method: Two-step procedure using size exclusion chromatography before and after refolding.

Reconstitution: **Centrifuge vial prior to opening.** Reconstitute in 0.1 M Acetate buffer, pH 4 and let the lyophilized pellet dissolve completely. For conversion into higher pH value, we recommend intensive dilution by relevant buffer to a concentration of 10 µg/ml. In higher concentrations the solubility of this antigen is limited.

Amino Acid Residues: MCDAFVGTWK LVSSENFDDY MKEVGVGFAT RKVAGMAKPN MIISVNGDVI TIKSESTFKN TEISFILGQE FDEVTADDRK VKSTITLDGG VLVHVQKWDG KSTTIKRKRE DDKLVVECVM KGVTSTRVYE RA

Storage & Stability: Store lyophilized protein at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 4°C for

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a limited period of time; it does not show any change after two weeks at 4°C. The lyophilized protein remains stable until the expiration date when stored at -20°C.

Applications: Western blotting, ELISA.

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