



## Product Datasheet

<b>Product Name</b>	Fatty Acid Binding Protein 4 Human Recombinant, His Tag
<b>Cata No</b>	CB501078
<b>Source</b>	<i>Escherichia Coli.</i>
<b>Synonyms</b>	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 lipolysis 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*<sup>-/-</sup> 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.

FABP4 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 132 amino acids and having a molecular mass of 18 kDa. FABP4 is fused to His tag at N-terminus and purified by standard chromatography techniques.

### Physical Appearance

Sterile Filtered colorless liquid formulation.

### Purity

Greater than 95% as determined by SDS-PAGE.

### Formulation

FABP4 His-Tag is supplied in 20mM Tris HCL pH=8, 0.5mM DTT and 50% glycerol.

### Stability

Store at 4°C if entire vial will be used within 2-4 weeks.

Store, frozen at -20°C for longer periods of time.

**Please avoid freeze thaw cycles.**