

Datasheet for ABIN7566020

## Diazepam Binding Inhibitor Protein (DBI) (AA 2-87) (His tag)



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### Overview

Quantity:	3 x 50 µg
Target:	Diazepam Binding Inhibitor (DBI)
Protein Characteristics:	AA 2-87
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This Diazepam Binding Inhibitor protein is labelled with His tag.

### Product Details

Purpose:	Acyl-CoA-binding Protein (human) (rec.) (His)
Cross-Reactivity:	Human
Characteristics:	Human acyl-CoA-binding protein (aa 2-87) is fused at the C-terminus to a His-tag.
Purity:	>95 % (SDS-PAGE)
Endotoxin Level:	<0.01EU/µg purified protein (LAL test).

### Target Details

Target:	Diazepam Binding Inhibitor (DBI)
Alternative Name:	Acyl-CoA-binding Protein ( <a href="#">DBI Products</a> )
Background:	ACBP, Diazepam-binding Inhibitor, DBI, Endozepine, EP Acyl-coenzyme A (CoA)-binding protein (ACBP) is an ubiquitously expressed 86 aa polypeptide

## Target Details

that binds medium- and long-chain acyl-CoA esters with very high affinity. It plays a role as an intracellular carrier of acyl-CoA esters and regulates lipid metabolism in the cytoplasm of most cell types. In addition to its function within the cells as acyl-coenzyme A (CoA)-binding protein, ACBP also functions as secreted protein called Diazepam-Binding Inhibitor (DBI) that can interact with the benzodiazepine-binding site of the gamma-aminobutyric acid (GABA) type A receptor, GABAAR, and modulate its activity. ACBP is secreted upon induction of autophagy (energy deficiency) in different organisms including mouse and human. ACBP levels correlate with human body mass index (BMI). Increasing ACBP levels in mice triggers lipogenesis, food intake and weight gain and neutralization of ACBP increases lipolysis, reduces food intake post-starvation and causes weight loss in mice. Obese patients exhibit elevated plasma levels of ACBP, while a reduction in the ACBP mRNA and ACBP plasma protein levels is observed in these patients after an important weight loss. ACBP might be useful for the prevention or treatment of obesity and metabolic syndrome diseases.

Molecular Weight: 12kDa (SDS-PAGE), 12kDa (Monomer by SEC)

UniProt: [P07108](#)

## Application Details

Restrictions: For Research Use only

## Handling

Format: Lyophilized

Reconstitution: 1 mg/mL after reconstitution

Concentration: 1 mg/mL

Buffer: Contains PBS.

Handling Advice: After reconstitution, prepare aliquots and store at -20 °C. Avoid freeze/thaw cycles. Centrifuge lyophilized vial before opening and reconstitution. PBS containing at least 0.1 % BSA should be used for further dilutions.

Storage: 4 °C, -20 °C

Storage Comment: Short Term Storage: +4°C  
Long Term Storage: -20°C  
Use & Stability: Stable for at least 6 months after receipt when stored at -20°C. Working aliquots are stable for up to 3 months when stored at -20°C.