

Product Specification Sheet

Human Fatty Acid Synthase (FASN) Antibodies

Cat # FASN12-P	Mouse FASN Control/Blocking Peptide # 2	SIZE: 100 µg
Cat # FASN12-A	Rabbit anti-mouse FASN IgG (affinity pure) # 2	SIZE: 100 µg

Fatty Acid Synthase (FASN) catalyzes the synthesis of palmitate from acetyl-CoA and malonyl-CoA, in the presence of NADPH, into long-chain saturated fatty acids. In some cancer cell lines, this protein has been found to be fused with estrogen receptor-alpha (ER-alpha), in which the N-terminus of FASN is fused in-frame with the C-terminus of ER-alpha. FASN is highly expressed in adipocytes and liver. FASN is a central enzyme in de novo lipogenesis. FASN is a target for SREBP and is upregulated by LXR activation; it is also one of the accepted markers for insulin resistance, SREBP and LXR activation.

FASN: Bovine: 2513 aa; Pig: 2411 aa; Chick: 2511 aa; human: 2511 aa; Rat: 2505 aa; mouse: 2504 aa; 272.4kDa; Chromosome: 11E2. Expression: high in brain, lungs, and liver.

Source of Antigen and Antibodies

Antigen	18-aa peptide of Mouse FASN (Protein accession # (P19096) ; ref. 1); designated as FASN12-P control/blocking peptide conjugated to KLH; epitope location ~ C-terminus
Antibody host/type	Rabbit, Polyclonal IgG # 2 (Cat # FASN12-A), purified over antigen-Agarose
2-Ab	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available).
Negative Control Ab	Non-immune rabbit IgG (Cat # 20009-1) to be used as -ve control for ELISA, WB, IHC etc.

Form & Storage of Antibodies/Peptide Control

Affinity pure IgG

100 ug/100ul solution lyophilized powder

Supplied in **Buffer:** PBS+0.1% BSA

Reconstitute powder in PBS at 1mg/ml

Control/blocking peptide

100 ug/100 ul solution lyophilized powder

Supplied in Buffer: PBS pH 7.5,

Reconstitute powder in PBS at 1 mg/ml.

Storage

Short-term: unopened, undiluted vials for less than a week at 4oC.

Long-term: at -20°C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at -20°C or below.

Shipping: 4°C for solutions and room temp for powder.

Recommended Usage

Western Blotting: 1-10 µg/ml; using affinity pure antibody (chemiluminescence technique).

ELISA: 1:100K; using 50-100 ng control peptide/well.

Histochemistry & Immunofluorescence: Not tested; we recommend the use of affinity purified antibody at 2-10 µg/ml.

Specificity & Cross-reactivity

Mouse FASN12-P peptide sequence is 100% conserved in mouse, rat and bovine; 94% conserved in human. We recommend using FASN11-A for detecting human FASN protein. Antibody cross-reactivity in various species is not known. The control peptide, because of its low mol. Wt (<3 kDa), is not suitable for Western. It should be used for ELISA or antibody blocking experiments (use 5-10 ug control peptide per 1 ug of aff pure IgG or 1 ul antiserum) to confirm antibody specificity (see detailed protocol at the web site).

General References:

1. Ueno K. (2000). Genes to Cells 5 (10), 859–869.

List of related items, data sheets, and publications, using ADI antibodies is posted on the web site

*This product is for in vitro research use only.

Related material available from ADI

Antibodies to mouse and human FADS and FASNs.

FASN12-A-P

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