

Fatty Acid Synthase mouse mAb

Catalog No: YM1224

Reactivity: Human; Mouse; Rat; Monkey; Bovine

Applications: WB;IP;IF

Target: Fatty Acid Synthase

Fields: >>Fatty acid biosynthesis;>>Metabolic pathways;>>Fatty acid

metabolism;>>AMPK signaling pathway;>>Insulin signaling pathway;>>Alcoholic

liver disease

Gene Name: fasn

Human Gene ld: 2194

Human Swiss Prot

No:

Mouse Swiss Prot

No:

140.

P19096

P49327

Immunogen: Purified recombinant human Fatty Acid Synthase protein fragments expressed

in E.coli.

Specificity: This antibody detects endogenous levels of Fatty Acid Synthase and does not

cross-react with related proteins.

Formulation: Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Monoclonal, Mouse

Dilution: wb 1:1000 icc 1:400. IF 1:50-200

Purification: The antibody was affinity-purified from mouse ascites by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 273kD

Cell Pathway: Fatty acid biosynthesis;Insulin_Receptor;

oleate.,functi

Background:

The enzyme encoded by this gene is a multifunctional protein. Its main function is to catalyze 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 (ERalpha), in which the N-terminus of FAS is fused in-frame with the C-terminus of ER-alpha. [provided by RefSeq, Jul 2008],

Function:

catalytic activity:(3R)-3-hydroxyacyl-[acyl-carrier-protein] + NADP(+) = 3-oxoacyl-[acyl-carrier-protein] + NADPH.,catalytic activity:(3R)-3-hydroxypalmitoyl-[acyl-carrier-protein] = hexadec-2-enoyl-[acyl-carrier-protein] + H(2)O.,catalytic activity:Acetyl-CoA + [acyl-carrier-protein] = CoA + acetyl-[acyl-carrier-protein].,catalytic activity:Acetyl-CoA + n malonyl-CoA + 2n NADPH = a long-chain fatty acid + (n+1) CoA + n CO(2) + 2n NADP(+).,catalytic activity:Acyl-[acyl-carrier-protein] + malonyl-[acyl-carrier-protein] = 3-oxoacyl-[acyl-carrier-protein] + CO(2) + [acyl-carrier-protein].,catalytic activity:Acyl-[acyl-carrier-protein] + NADP(+) = trans-2,3-dehydroacyl-[acyl-carrier-protein] + NADPH.,catalytic activity:Malonyl-CoA + [acyl-carrier-protein] = CoA + malonyl-[acyl-carrier-protein].,catalytic activity:Oleoyl-[acyl-carrier-protein] + H(2)O = [acyl-carrier-protein] +

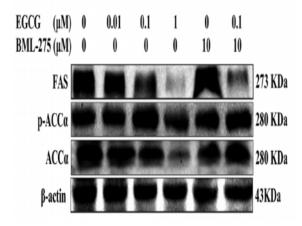
Subcellular Location:

Cytoplasm . Melanosome . Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

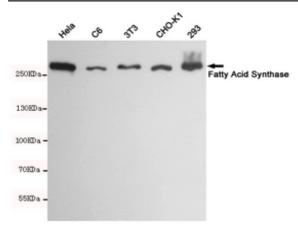
Expression:

Ubiquitous. Prominent expression in brain, lung, liver and mammary gland.

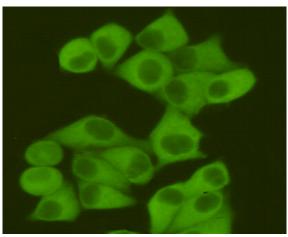
Products Images



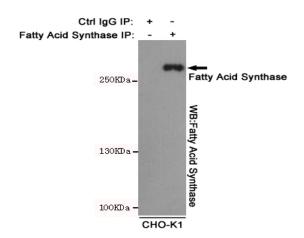
Ding, Hongyan, et al. "Epigallocatechin-3-gallate activates the AMP-activated protein kinase signaling pathway to reduce lipid accumulation in canine hepatocytes." Journal of Cellular Physiology 236.1 (2021): 405-416.



Western blot detection of Fatty Acid Synthase in Hela,C6,3T3,CHO-K1 and 293 cell lysates using Fatty Acid Synthase mouse mAb(dilution 1:1000).Predicted band size:273kDa.Observed band size:273kDa.



Immunocytochemistry staining of Hela cells fixed with 4% Paraformaldehyde and using anti-Fatty Acid Synthase mouse mAb (dilution 1:400).



Immunoprecipitation analysis of CHO-K1 cell lysates using Fatty Acid Synthase mouse mAb.