

FASN Antibody (Center)

Mouse Monoclonal Antibody (Mab)

Catalog # AM2067B

Product Information

Application	WB, IF, E
Primary Accession	P49327
Other Accession	NP_004095.4
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1, κ
Clone Names	2070CT422.21.35
Antigen Region	942-973

Additional Information

Other Names	Fatty acid synthase, [Acyl-carrier-protein] S-acetyltransferase, [Acyl-carrier-protein] S-malonyltransferase, 3-oxoacyl-[acyl-carrier-protein] synthase, 3-oxoacyl-[acyl-carrier-protein] reductase, 3-hydroxyacyl-[acyl-carrier-protein] dehydratase, Enoyl-[acyl-carrier-protein] reductase, Oleoyl-[acyl-carrier-protein] hydrolase, FASN, FAS
Target/Specificity	This FASN antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 942-973 amino acids from the Central region of human FASN.
Dilution	WB~~1:8000 IF~~1:25 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Euglobin precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	FASN Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

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 (ER-alpha), in which the N-terminus of FAS is fused in-frame with the C-terminus of ER-alpha.

References

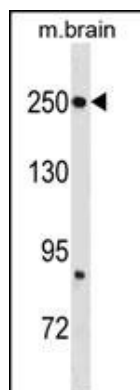
References for protein:

1. Bailey, S.D., et al. *Diabetes Care* 33(10):2250-2253(2010)
2. Nguyen, P.L., et al. *J. Clin. Oncol.* 28(25):3958-3964(2010)
3. Ruano, G., et al. *Pharmacogenomics* 11(7):959-971(2010)
4. Tischler, V., et al. *Histopathology* 56(6):811-815(2010)
5. Dorn, C., et al. *Int J Clin Exp Pathol* 3(5):505-514(2010)

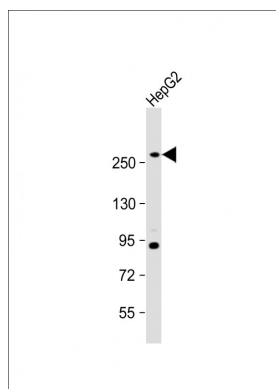
References for HepG2 cell line:

1. Knowles BB, et al. (1980). Human hepatocellular carcinoma cell lines secrete the major plasma proteins and hepatitis B surface antigen. *Science* 209: 497-499.[PubMed: 6248960].
2. Darlington GJ, et al. (1987). Growth and hepatospecific gene expression of human hepatoma cells in a defined medium. *In Vitro Cell. Dev. Biol.* 23: 349-354.[PubMed: 3034851].
3. Ihrke, G; Neufeld, EB; Meads, T; Shanks, MR; Cassio, D; Laurent, M; Schroer, TA; Pagano, RE et al. (1993). "WIF-B cells: an in vitro model for studies of hepatocyte polarity". *Journal of Cell Biology* 123 (6): 1761-1775. [PubMed:7506266].
4. Mersch-Sundermann, V.; Knasmüller, S.; Wu, X. J.; Darroudi, F.; Kassie, F. (2004). "Use of a human-derived liver cell line for the detection of cytoprotective, antigenotoxic and cogenotoxic agents". *Toxicology* 198 (1-3): 329-340. [PubMed:15138059].

Images

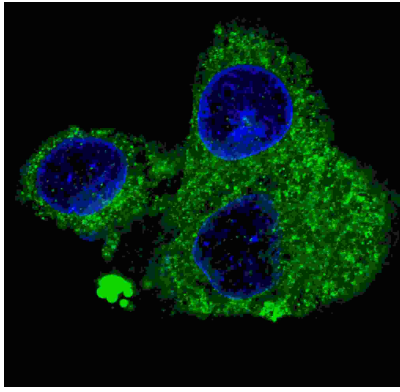


FASN Antibody (Center) (Cat. #AM2067b) western blot analysis in mouse brain tissue lysates (35µg/lane). This demonstrates the FASN (Center) antibody detected the FASN (Center) protein (arrow).



Anti- at 1:1000 dilution + HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 273 kDa Blocking/Dilution buffer: 5% NFDm/TBST.

Fluorescent confocal image of HepG2 cells stained with FASN (Center) antibody. HepG2 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.2%, 30 min). Cells were then incubated with AM2067b FASN primary antibody (1:200, 2 h at room temperature). For secondary antibody, Alexa Fluor® 488 conjugated donkey



anti-mouse antibody (green) was used (1:1000, 1h). Nuclei were counterstained with Hoechst 33342 (blue) (10 $\mu\text{g}/\text{ml}$, 5 min). Note the highly specific localization of the FASN immunosignal to the cytoplasm, supported by Human Protein Atlas Data (<http://www.proteinatlas.org/ENSG00000169710>).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.