

Anti-FASN Picoband Antibody

Catalog # ABO12551

Product Information

Application	WB, IHC-P, ICC
Primary Accession	P49327
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Fatty acid synthase(FASN) detection. Tested with WB, IHC-P, ICC in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	2194
Other Names	Fatty acid synthase, 2.3.1.85, [Acyl-carrier-protein] S-acetyltransferase, 2.3.1.38, [Acyl-carrier-protein] S-malonyltransferase, 2.3.1.39, 3-oxoacyl-[acyl-carrier-protein] synthase, 2.3.1.41, 3-oxoacyl-[acyl-carrier-protein] reductase, 1.1.1.100, 3-hydroxyacyl-[acyl-carrier-protein] dehydratase, 4.2.1.59, Enoyl-[acyl-carrier-protein] reductase, 1.3.1.39, Oleoyl-[acyl-carrier-protein] hydrolase, 3.1.2.14, FASN, FAS
Calculated MW	273427
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, By Heat Immunocytochemistry,0.5-1 μ g/ml Western blot, 0.1-0.5 μ g/ml
Subcellular Localization	Cytoplasm . Melanosome . Identified by mass spectrometry in melanosome fractions from stage I to stage IV.
Tissue Specificity	Ubiquitous. Prominent expression in brain, lung, and liver. .
Source	Eukaryota
Protein Name	Fatty acid synthase
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Immunogen	E. coli-derived human FASN recombinant protein (Position: M1-E226). Human FASN shares 90.3% and 90.7% amino acid (aa) sequence identity with mouse

and rat FASN, respectively.

Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

Protein Information

Name	FASN
Synonyms	FAS
Function	Fatty acid synthetase is a multifunctional enzyme that catalyzes the de novo biosynthesis of long-chain saturated fatty acids starting from acetyl-CoA and malonyl-CoA in the presence of NADPH. This multifunctional protein contains 7 catalytic activities and a site for the binding of the prosthetic group 4'-phosphopantetheine of the acyl carrier protein ([ACP]) domain.
Cellular Location	Cytoplasm. Melanosome. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV
Tissue Location	Ubiquitous. Prominent expression in brain, lung, liver and mammary gland.

Background

Fatty acid synthase (FAS) is an enzyme that in humans is encoded by the FASN gene. It is mapped to 17q25. 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.

Images



Western blot analysis of FASN expression in HEPG2 whole cell lysates (lane 1), U87 whole cell lysates (lane 2) and RAJI whole cell lysates (lane 3). FASN at 273KD was detected using rabbit anti- FASN Antigen Affinity purified polyclonal antibody (Catalog # ABO12551) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method .

FASN was detected in paraffin-embedded sections of human intestinal cancer tissues using rabbit anti- FASN Antigen Affinity purified polyclonal antibody (Catalog # ABO12551) at 1 µg/mL. The immunohistochemical section was developed using SABC method (Catalog # SA2010).

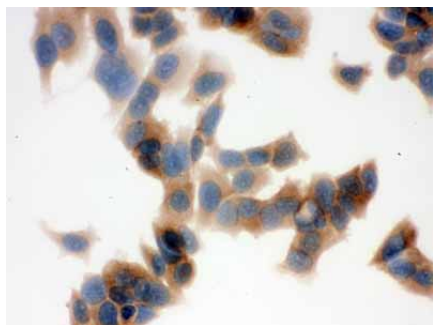
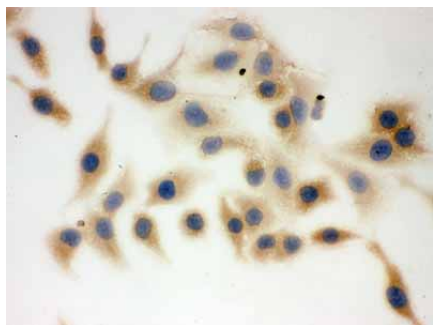
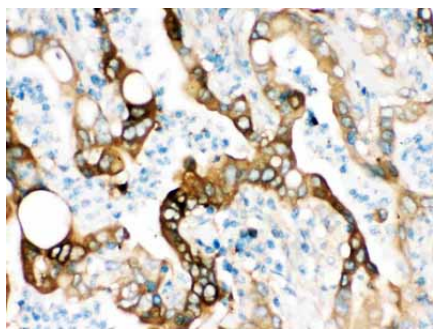


Figure 3. IHC analysis of FASN using anti-FASN antibody (ABO12551). FASN was detected in immunocytochemical section of A549 cell. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti-FASN Antibody (ABO12551) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Figure 4. IHC analysis of FASN using anti-FASN antibody (ABO12551). FASN was detected in immunocytochemical section of MCF-7 cell. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti-FASN Antibody (ABO12551) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

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