

Anti-FASN Picoband Antibody

Catalog # ABO12551

Specification

Anti-FASN Picoband Antibody - Product Information

Application WB, IHC-P, ICC

Primary Accession P49327
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal 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.

Anti-FASN Picoband Antibody - 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 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, By Heat
br>Immunocytochemistry,0.5-1 μg/ml
dr>
etr> Western blot, 0.1-0.5 μg/ml
br>

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. .

Protein Name

Fatty acid synthase

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.



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 r°Constitution, 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.

Anti-FASN Picoband Antibody - 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.

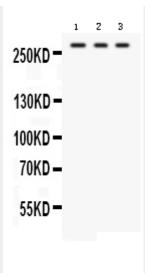
Anti-FASN Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

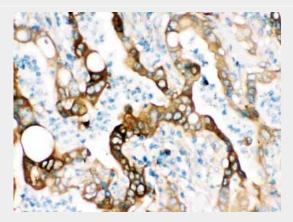
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-FASN Picoband Antibody - 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) at0.5 ??g/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 \hat{l}^{1}_{4} g/mL. The immunohistochemical section was developed using SABC method (Catalog # SA2010).

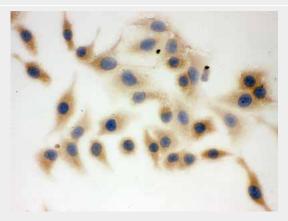


Figure 3. IHC analysis of FASN using anti-FASN antibody (ABO12551).FASN was detected in immunocytochemical section of A549 cell. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with $11\frac{1}{4}$ g/ml rabbit anti-FASN Antibody



(ABO12551) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

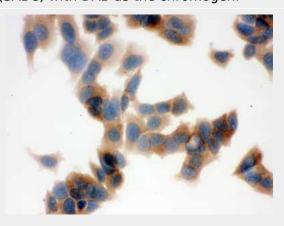


Figure 4. IHC analysis of FASN using anti-FASN antibody (ABO12551).FASN was detected in immunocytochemical section of MCF-7 cell. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue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

Anti-FASN Picoband Antibody - Background

Fatty acid synthase (FAS) is an enzyme that in humans is encoded by the FASNÂ 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.