

Product name:	Fatty Acid Synthase Rabbit Polyclonal Antibody
Cat number:	ABN10849
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human Fatty Acid Synthase. AA range:1478-1527
Reactivity:	Human
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000
Molecular Weight:	273kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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. [provided by RefSeq, Jul 2008],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] + oleate.,function:Fatty acid synthetase catalyzes the formation of long-chain fatty acids from acetyl-CoA, malonyl-CoA and NADPH. This multifunctional protein has 7 catalytic activities and an acyl carrier protein.,miscellaneous:The relatively low beta-ketoacyl synthase activity may be attributable to the low 4'-phosphopantetheine content of the protein.,sequence caution:Several sequencing errors.,similarity:Contains 1 acyl carrier domain.,subcellular location:Identified by mass spectrometry in melanosome fractions from stage I to stage IV.,subunit:Homodimer which is arranged in a head to tail fashion.,tissue specificity:Ubiquitous. Prominent expression in brain, lung, and liver.,