

# Immunotag™ Fatty Acid Synthase mouse mAb

Antibody Specification	
Catalog No.	ITM1523
Product Description	Immunotag™ Fatty Acid Synthase mouse mAb
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	Fatty Acid Synthase
Clonality	Monoclonal
Storage/Stability	-20°C/1 year
Application	WB,IP,IF
Recommended Dilution	wb dilution 1:1000 icc dilution 1:200
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat,Monkey
Host Species	Mouse
Specificity	This antibody detects endogenous levels of Fatty Acid Synthase and does not cross-react with related proteins.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	fasn
Accession No.	P49327 P19096
Alternate Names	[Acyl-carrier-protein] S acetyltransferase; [Acyl-carrier-protein] S malonyltransferase; 3-hydroxypalmitoyl-[acyl-carrier-protein] dehydratase; 3-oxoacyl-[acyl-carrier-protein] reductase; 3-oxoacyl-[acyl-carrier-protein] synthase; Enoyl-[acyl-carrier-protein] reductase; FAS; FAS_HUMAN; FASN; Fatty acid synthase; MGC14367; MGC15706; OA 519; Oleoyl-[acyl-carrier-protein] hydrolase; SDR27X1; Short chain dehydrogenase/reductase family 27X member 1.

## Antibody Specification

Description	fatty acid synthase(FASN) Homo sapiens 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],
Cell Pathway/ Category	Fatty acid biosynthesis,Insulin_Receptor,
Protein Expression	B-cell lymphoma,Brain,Epithelium,Eye,Liver,
Subcellular Localization	cytoplasm,mitochondrion,Golgi apparatus,cytosol,plasma membrane,cell-cell adherens junction,membrane,melanosome,glycogen granule,extracellular exosome,
Protein 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] + 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.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.