

Immunotag™ PPAR-γ Monoclonal Antibody

Antibody Specification	
Catalog No.	ITM1082
Product Description	Immunotag™ PPAR-γ Monoclonal Antibody
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	PPAR-γ
Clonality	Monoclonal
Storage/Stability	-20°C/1 year
Application	WB,IF
Recommended Dilution	Western Blot: 1/1000 - 1/2000. Immunofluorescence: 1/100 - 1/500. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat,Bovine,Dog,Goat,Pig,Rabbit,sheep
Host Species	Mouse
Immunogen	Purified recombinant human PPAR-γ (C-terminus) protein fragments expressed in Ecoli
Specificity	PPAR-γ Monoclonal Antibody detects endogenous levels of PPAR-γ protein.
Purification	Affinity purification
Form	Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.2% sodium azide, 50% glycerol.
Gene Name	PPARG
Accession No.	P37231 P37238 O88275
Alternate Names	PPARG; NR1C3; Peroxisome proliferator-activated receptor gamma; PPAR-gamma; Nuclear receptor subfamily 1 group C member 3

Antibody Specification

Description	peroxisome proliferator activated receptor gamma(PPARG) Homo sapiens This gene encodes a member of the peroxisome proliferator-activated receptor (PPAR) subfamily of nuclear receptors. PPARs form heterodimers with retinoid X receptors (RXRs) and these heterodimers regulate transcription of various genes. Three subtypes of PPARs are known: PPAR-alpha, PPAR-delta, and PPAR-gamma. The protein encoded by this gene is PPAR-gamma and is a regulator of adipocyte differentiation. Additionally, PPAR-gamma has been implicated in the pathology of numerous diseases including obesity, diabetes, atherosclerosis and cancer. Alternatively spliced transcript variants that encode different isoforms have been described. [provided by RefSeq, Jul 2008],
Cell Pathway/ Category	Protein_Acetylation
Protein Expression	Adipose,Adipose tissue,Bone marrow,Colon carcinoma,Heart,PI
Subcellular Localization	nucleus,nucleoplasm,Golgi apparatus,cytosol,intracellular membrane-bounded organelle,perinuclear region of cytoplasm,RNA polymerase II transcription factor complex,
Protein Function	Additional isoforms seem to exist,disease:Defects in PPARG are the cause of familial partial lipodystrophy type 3 (FPLD3) [MIM:604367]. Familial partial lipodystrophies (FPLD) are a heterogeneous group of genetic disorders characterized by marked loss of subcutaneous (sc) fat from the extremities. Affected individuals show an increased preponderance of insulin resistance, diabetes mellitus and dyslipidemia.,disease:Defects in PPARG can lead to type 2 insulin-resistant diabetes and hypertension.,disease:Defects in PPARG may be associated with colon cancer.,disease:Defects in PPARG may be associated with susceptibility to obesity [MIM:601665],disease:Variation in PPARG is associated with carotid intimal medial thickness 1 (CMT1) [MIM:609338]. CMT is a measure of atherosclerosis that is independently associated with traditional atherosclerotic cardiovascular disease risk factors and coronary atherosclerotic burden. 35 to 45% of the variability in multivariable-adjusted CMT is explained by genetic factors.,function:Receptor that binds peroxisome proliferators such as hypolipidemic drugs and fatty acids. Once activated by a ligand, the receptor binds to a promoter element in the gene for acyl-CoA oxidase and activates its transcription. It therefore controls the peroxisomal beta-oxidation pathway of fatty acids. Key regulator of adipocyte differentiation and glucose homeostasis.,online information:Peroxisome proliferator-activated receptor entry,online information:The Singapore human mutation and polymorphism database,polymorphism:Genetic variation in PPARG may influence body mass index (BMI) [MIM:606641]. BMI reflects the amount of fat, lean mass, and body build.,similarity:Belongs to the nuclear hormone receptor family.,similarity:Belongs to the nuclear hormone receptor family. NR1 subfamily.,similarity:Contains 1 nuclear receptor DNA-binding domain.,subunit:Forms a heterodimer with the retinoic acid receptor RXRA called adipocyte-specific transcription factor ARF6. Interacts with NCOA6 coactivator, leading to a strong increase in transcription of target genes. Interacts with coactivator PPARBP, leading to a mild increase in transcription of target genes. Interacts with FAM120B (By similarity). Interacts with NOCA7 in a ligand-inducible manner. Interacts with NCOA1 LXXLL motifs. Interacts with TGFB1I1. Interacts with DNTTIP2.,tissue specificity:Highest expression in adipose tissue. Lower in skeletal muscle, spleen, heart and liver. Also detectable in placenta, lung and ovary.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.

