

Immunotag™ PPAR-γ Monoclonal Antibody

Antibody Specification	
Catalog No.	ITM0528
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,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human
Host Species	Mouse
Immunogen	Purified recombinant fragment of PPAR-γ (aa170-270) expressed in E. Coli.
Specificity	PPAR-γ Monoclonal Antibody detects endogenous levels of PPAR-γ protein.
Purification	Affinity purification
Form	Ascitic fluid containing 0.03% sodium azide.
Gene Name	PPARG
Accession No.	P37231 P37238
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.,
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