

# 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

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| Description                 | <p>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],</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Cell Pathway/<br>Category   | Protein_Acetylation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Protein<br>Expression       | Adipose,Adipose tissue,Bone marrow,Colon carcinoma,Heart,PI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Subcellular<br>Localization | nucleus,nucleoplasm,Golgi apparatus,cytosol,intracellular membrane-bounded organelle,perinuclear region of cytoplasm,RNA polymerase II transcription factor complex,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Protein Function            | <p>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.,</p> |
| Usage                       | For Research Use Only! Not for diagnostic or therapeutic procedures.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

