

PPAR gamma protein

Catalog No: YD0087

Reactivity: Human

Applications: WB;SDS-PAGE

Gene Name: PPARG

Protein Name: PPAR gamma protein

Sequence: Amino acid: 4-306, with his-MBP tag.

P37231

P37238

Human Gene ld: 5468

Human Swiss Prot

No:

Mouse Swiss Prot

No:

Formulation: Liquid in PBS

Concentration: SDS-PAGE > 90%

Storage Stability: -20°C/6 month,-80°C for long storage

Background: alternative products: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 hyptertension.,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 (CIMT1) [MIM:609338]. CIMT 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 CIMT 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

1/3

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 ligandinducible 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.,

Function:

negative regulation of transcription from RNA polymerase II promoter, regulation of cell growth, regulation of cytokine production, negative regulation of cytokine production, placenta development, immune system development, leukocyte differentiation, myeloid leukocyte differentiation, regulation of acute inflammatory response, negative regulation of acute inflammatory response, circulatory system process, transcription, regulation of transcription, DNA-dependent, regulation of transcription from RNA polymerase II promoter, lipid transport, defense response, immune response, response to nutrient, blood circulation, protein localization, regulation of blood pressure, negative regulation of cell proliferation, regulation of cell size, response to temperature stimulus, response to cold, response to abiotic stimulus, response to endogenous stimulus, response to hormone stimulus, negative regu

Subcellular Location:

Nucleus. Cytoplasm. Redistributed from the nucleus to the cytosol through a MAP2K1/MEK1-dependent manner. NOCT enhances its nuclear translocation.

Expression:

Highest expression in adipose tissue. Lower in skeletal muscle, spleen, heart and liver. Also detectable in placenta, lung and ovary.

Products Images

