Anti-PPAR gamma Antibody [E-8]

RT1668

Product Type:	Mouse monoclonal IgG1, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P, IP
Molecular Wt:	Predicted band size: 58 kDa
Clone number:	E-8

Description: Peroxisome proliferator-activated receptors (PPARs), members of the nuclear hormone receptor subfamily of transcription factors, form heterodimers with retinoid X receptors (RXRs). These heterodimers regulate transcription of genes involved in Insulin action, adipocyte differentiation, lipid metabolism and inflammation. PPARg is implicated in diseases including obesity, diabetes, atherosclerosis and cancer. PPARg activators include prostanoids, fatty acids, thiazolidinediones and N-(2-benzoylphenyl) tyrosine analogues. PPARg is a key component in adipocyte differentiation and fat-specific gene expression. A Pro12Ala polymorphism of the PPARg2 gene may reduce transactivation activity in vitro. This substitution may affect the immune response to ox-LDL and be associated with type 2 diabetes. In addition, the Pro12Ala variant of the PPARg2 gene may be correlated with abdominal obesity in type 2 diabetes.

Immunogen: specific for an epitope mapping between amino acids 486-505 at the C-terminus of PPARγ of human origin (identical to corresponding mouse sequence)

Positive control: Jurkat cell lysate, U-937 cell lysate, THP-1 cell lysate, Mouse ovary tissue lysate, Mouse liver tissue lysate, Rat liver tissue lysate, mouse colon tissue, rat colon tissue.

Subcellular location: Nucleus, Cytoplasm.

Database links: SwissProt: P37231 Human | P37238 Mouse | O88275 Rat

Recommended Dilutions:

WB	1:1,000
IHC-P	1:50-1:200
IP	1:1,000

Storage Buffer: 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Storage Instruction: Store at 4℃.

Images

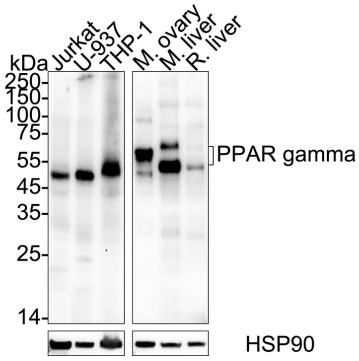

Fig1: Western blot analysis of PPAR gamma on different lysates with Mouse anti-PPAR gamma antibody (RT1668) at 1/1,000 dilution.

Lane 1: Jurkat cell lysate
Lane 2: U-937 cell lysate
Lane 3: THP-1 cell lysate
Lane 4: Mouse ovary tissue lysate
Lane 5: Mouse liver tissue lysate
Lane 6: Rat liver tissue lysate

Lysates/proteins at 30 µg/Lane.

Predicted band size: 58 kDa
Observed band size: 58/50 kDa

Exposure time: 59 seconds; ECL: K1802;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (RT1668) at 1/1,000 dilution was used in primary antibody dilution (K1803) at 4℃ overnight. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1/50,000 dilution was used for 1 hour at room temperature.

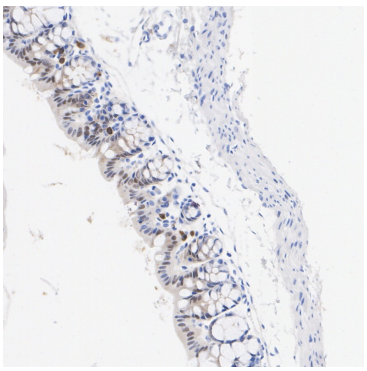

Fig2: Immunohistochemical analysis of paraffin-embedded mouse colon tissue with Mouse anti-PPAR gamma antibody (RT1668) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (RT1668) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

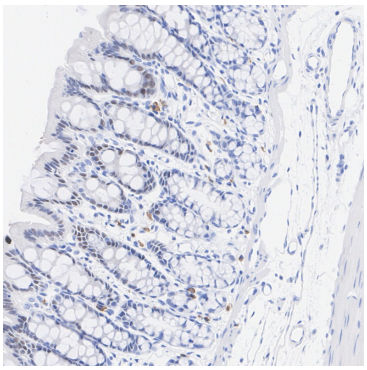

Fig3: Immunohistochemical analysis of paraffin-embedded rat colon tissue with Mouse anti-PPAR gamma antibody (RT1668) at 1/50 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (RT1668) at 1/50 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Background References

1. Chen H et al. PPAR-gamma signaling in nonalcoholic fatty liver disease: Pathogenesis and therapeutic targets. Pharmacol Ther. 2023 May
2. Stark JM et al. The Role of PPAR-gamma in Allergic Disease. Curr Allergy Asthma Rep. 2021 Oct