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antibody and ELISA experts

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Anti-PPAR gamma/PPARG Antibody Picoband®

Catalog Number: A00449-3

About PPARG

Peroxisome proliferator- activated receptor gamma (PPAR-gamma or PPARG), also known as the glitazone reverse insulin resistance receptor, or NR1C3 (nuclear receptor subfamily 1, group C, member 3) is a type II nuclear receptor (protein regulating genes) that in humans is encoded by the PPARG gene. 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.

Overview

Product Name	Anti-PPAR gamma/PPARG Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-PPAR gamma/PPARG Antibody Picoband® catalog # A00449-3. Tested in ELISA, IF, ICC, Flow Cytometry, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, Flow Cytometry, IF, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Storage Instructions	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	P37231

Technical Details

Immunogen	E.coli-derived human PPAR gamma/PPARG recombinant protein (Position: H58-K329).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for ICC.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG

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Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Human Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human Flow Cytometry (Fixed), 1-3 ug/1x10^6 cells, Human ELISA, 0.1-0.5 ug/ml, -

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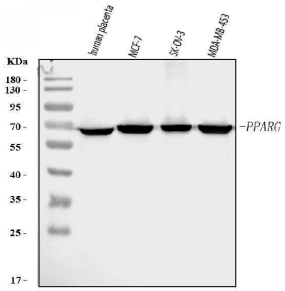
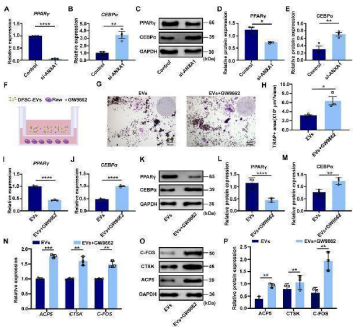
Anti-PPAR gamma/PPARG Antibody Picoband® (A00449-3) Images



Western blot analysis of PPAR Gamma/PPARG using anti-PPAR Gamma/PPARG antibody (A00449-3). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human placenta tissue lysates, Lane 2: human MCF-7 whole cell lysates, Lane 3: human SK-OV-3 whole cell lysates, Lane 4: human MDA-MB-453 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PPAR Gamma/PPARG antigen affinity purified polyclonal antibody (Catalog # A00449-3) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for PPAR Gamma/PPARG at approximately 65 kDa. The expected band size for PPAR Gamma/PPARG is at 65 kDa.



ANXA1 mediated PPARgamma-CEBPalpha pathway to regulate osteoclast differentiation (A) The mRNA level of PPARgamma in RAW264.7 cultured with siANXA1-EVs. (B) The mRNA level of CEBPalpha in RAW264.7 cultured with siANXA1-EVs. (C) The protein level of PPARgamma and CEBPalpha in RAW264.7 cultured with siANXA1-EVs. (D) Quantitative analysis of PPARgamma protein expression. (E) Quantitative analysis of CEBPalpha protein expression. (F) Schematic illustration of PPARgamma inhibited RAW264.7 and DFSC-EVs co-culture system. (G) Representative images of TRAP staining. Scale bar = 200 um. (H) Quantitative analysis of TRAP-positive area. (I) PPARgamma inhibited RAW264.7 construction. (J) The mRNA level of CEBPalpha in PPARgamma inhibited RAW264.7. (K) The protein level of PPARgamma and CEBPalpha in PPARgamma inhibited RAW264.7. (L) Quantitative analysis of PPARgamma protein expression. (M) Quantitative analysis of CEBPalpha protein expression. (N) The mRNA level of ACP5 , CTSK and CFOS in PPARgamma inhibited RAW264.7. (O) The protein level of ACP5, CTSK and CFOS in PPARgamma inhibited RAW264.7. (P) Western blotting quantification. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, **** $p < 0.0001$. n = 3.Index in PubMed under a CC BY license. PMID: 39834384

DFSCs-EVs/ANXA1 regulating tooth eruption by affecting osteoclast differentiation. (A) Representative micro-CT images of detecting tooth eruption distance. (B) Analysis of tooth eruption distance based on micro-CT. (C) Representative H&E staining images of the first mandibular molar area. (D) Analysis of tooth eruption distance based on

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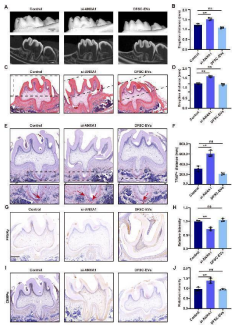
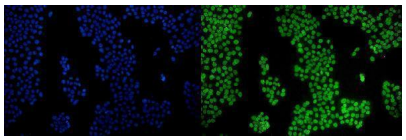
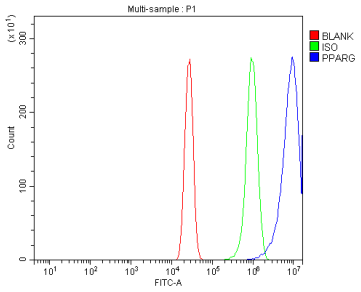


H&E staining. (E) Representative images of TRAP staining. (F) Quantitative analysis of TRAP-positive area. (G) Representative immunohistochemistry staining images of PPARgamma expression in the first mandibular molar area. (H) Quantitative analysis of PPARgamma expression in the first mandibular molar area. (I) Representative immunohistochemistry staining images of CEBPalpha expression in the first mandibular molar area. (J) Quantitative analysis of CEBPalpha expression in the first mandibular molar area. ns, not significant. Scale bar = 1 mm ** p < 0. 01. n = 3.Index in PubMed under a CC BY license. PMID: 39834384



IF analysis of PPAR gamma/PPARG using anti-PPAR gamma/PPARG antibody (A00449-3). PPAR gamma/PPARGNOX4 was detected in an immunocytochemical section of A431 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-PPAR gamma/PPARG Antibody (A00449-3) overnight at 4°C. DyLight488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Flow Cytometry analysis of A431 cells using anti-PPAR Gamma/PPARG antibody (A00449-3). Overlay histogram showing A431 cells stained with A00449-3 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PPAR Gamma/PPARG Antibody (A00449-3, 1 ug/1x106 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x106 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x106) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

3 Publications Citing This Product

1. PubMed ID: 10.4161/rna.8.5.16043, MiRNA-20a promotes osteogenic differentiation of human mesenchymal stem cells by co-regulating BMP signaling

2. PubMed ID: 10.4314/tjpr.v16i11.13, Prophylactic effects of triptolide on colon cancer development in azoxymethane/dextran sulfate sodiuminduced mouse model

3. PubMed ID: 10.1371/journal.pone.0071265, Electrospun Poly(L-lactide)/Poly(epsilon-caprolactone) Blend Nanofibrous Scaffold: Characterization and Biocompatibility with Human Adipose-Derived Stem Cells

Visit bosterbio.com/anti-ppar-gamma-pparg-picoband-trade-antibody-a00449-3-boster.html to see all 3 publications.

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For Research Use Only. Not for use in diagnostic procedures.