

Anti-Interleukin-6 IL6 Antibody Picoband®

Catalog Number: RP1012

About IL6

Interleukin-6 (IL-6) is a protein that in humans is encoded by the IL6 gene. IL-6 is an interleukin that acts as both a pro-inflammatory and anti-inflammatory cytokine. It is secreted by T cells and macrophages to stimulate immune response to trauma, especially burns or other tissue damage leading to inflammation. IL-6 is one of the most important mediators of fever and of the acute phase response. IL-6 is also essential for hybridoma growth and is found in many supplemental cloning media such as briclone. Bowcock et al. (1988) assigned the IL6 gene to chromosome 7p21. By in situ hybridization and Southern blot analysis of mouse-human hybrid cell lines, Sutherland et al. (1988) mapped the IL-6 gene to chromosome 7p15.

Overview

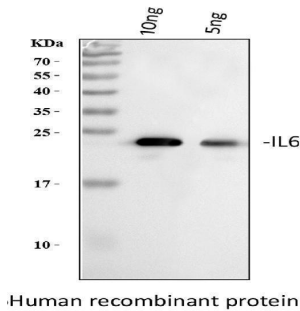
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|----------------------|--|
| Product Name | Anti-Interleukin-6 IL6 Antibody Picoband® |
| Reactive Species | Human |
| Description | Boster Bio Anti-Interleukin-6 IL6 Antibody catalog # RP1012. Tested in WB applications. This antibody reacts with 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 | WB |
| Clonality | Polyclonal |
| Formulation | Each vial contains 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3. Carrier free (No BSA) form available in stock. If you want this antibody carrier free please specify "Carrier Free" or "No BSA" in your order note. |
| Storage Instructions | Store 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 freeze-thaw cycles. |
| Host | Rabbit |
| Uniprot ID | P05231 |

Technical Details

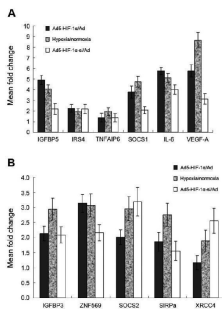
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|-------------------------------|---|
| Immunogen | E. coli-derived human IL-6 recombinant protein (Position: P29-M212). |
| Recommended Detection Systems | Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot. |
| Cross Reactivity | No cross-reactivity with other proteins |
| Isotype | Rabbit IgG |
| 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, 0.1-0.5ug/ml, Human |

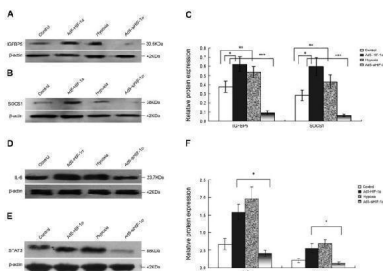
Anti-Interleukin-6 IL6 Antibody Picoband® (RP1012) Images



Western blot analysis of IL-6 using anti-IL-6 antibody (RP1012). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. Lane 1: recombinant human IL6 protein 10 ng, Lane 2: recombinant human IL6 protein 5 ng. 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-IL-6 antigen affinity purified polyclonal antibody (Catalog # RP1012) 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.

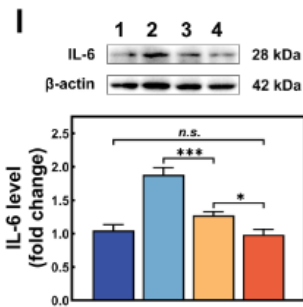


Real-time PCR analysis of upregulated or downregulated gene expression in response to HIF-1alpha (A) Aliquots of the same RNA preparations used for microarray hybridization were analyzed by quantitative real-time PCR. In three pairwise comparisons, the upregulation-folds of IGFBP5, IRS4, TNFAIP6, SOCS1, IL-6, VEGF-A mRNA expression were calculated. The mean and standard error are shown ($p < 0.05$). (B) Aliquots of the same RNA preparations used for microarray hybridization were analyzed by quantitative real-time PCR. In three pairwise comparisons, the downregulation-folds of IGFBP3, ZNF569, SOCS2, SIRPb and XRCC4 mRNA were calculated. The mean and standard error are shown ($p < 0.05$). Index in PubMed under a CC BY license. PMID: 20003295



Western blot analysis of regulation of protein expression by HIF-1alpha in NCI-H446 cells. According to different treatments, all the cells were divided into four groups: control group (the cells cultured under normoxic conditions of 20% O₂), Ad5-HIF-1alpha transfection group, hypoxia group (the cells cultured under normoxic conditions of 1% O₂) and Ad5-siHIF-1alpha transfection group (after transfection, the cells were cultured under normoxic conditions of 1% O₂). (A) Western blot analysis for IGFBP5 protein expressed by the cells of four groups. (B) Western blot analysis for SOCS1 protein expressed by the cells of four groups. (C) Densitometric analysis of the IGFBP5 and SOCS1 bands compared to the corresponding beta-actin bands ($*p < 0.05$ expression of IGFBP5 or SOCS1 protein in Ad5-HIF-1alpha group vs. control group; $**p < 0.05$ expression of IGFBP5 or SOCS1 protein in hypoxia group vs. control group; $***p < 0.05$ expression of IGFBP5 or SOCS1 protein in Ad5-siHIF-1alpha group vs. control group). (D) Western blot analysis for IL-6 protein expressed by the cells of four groups. (E) Western blot analysis for STAT3 protein expressed by the cells of four groups. (F) Densitometric

analysis of the IL-6 and STAT3 bands compared to the corresponding beta-actin bands (* $p < 0.05$ expression of IL-6 or STAT3 protein in Ad5-HIF-1alpha group vs. Ad5-siHIF-1alpha group group.) Index in PubMed under a CC BY license. PMID: 20003295



Western blot analysis of IL-6 using anti-IL-6 antibody (RP1012). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. Lane 1-4: human HK-2 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-IL-6 antigen affinity purified polyclonal antibody (Catalog # RP1012) at 1:1000 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 for 1 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system.

34 Publications Citing This Product

1. PubMed ID: 10.1186/1756-9966-28-150, The effects of HIF-1alpha on gene expression profiles of NCI-H446 human small cell lung cancer cells
2. PubMed ID: 10.3390/molecules181012916, The Anti-Lung Cancer Activities of Steroidal Saponins of *P. polyphylla* Smith var. *chinensis* (Franch.) Hara through Enhanced Immunostimulation in Experimental Lewis Tumor-Bearing C57BL/6 Mice and Induction of Apoptosis in the A549 Cell Line
3. PubMed ID: 10.1097/BRS.0000000000001726, Macrophage Inhibition Factor-Mediated CD74 Signal Modulate Inflammation and Matrix Metabolism in the Degenerated Cartilage Endplate Chondrocytes by Activating Extracellular Signal Regulated Kinase 1/2

Visit bosterbio.com/anti-human-il-6-antibody-rp1012-boster.html to see all 34 publications.

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