

Anti-IL17/II17a Antibody Picoband®

Catalog Number: A00421-2

About II17a

Interleukin-17A is a protein that in humans is encoded by the IL17A gene. The protein encoded by this gene is a proinflammatory cytokine produced by activated T cells. This cytokine regulates the activities of NF-kappaB and mitogen-activated protein kinases. This cytokine can stimulate the expression of IL6 and cyclooxygenase-2 (PTGS2/COX-2), as well as enhance the production of nitric oxide (NO). High levels of this cytokine are associated with several chronic inflammatory diseases including rheumatoid arthritis, psoriasis and multiple sclerosis.

Overview

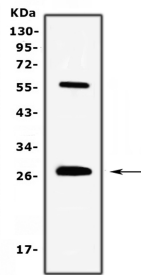
Product Name	Anti-IL17/II17a Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-IL17/II17a Antibody Picoband® catalog # A00421-2. Tested in ELISA, IHC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody 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	IHC, WB, ELISA (Cap)
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na ₂ HPO ₄ .
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	Q62386

Technical Details

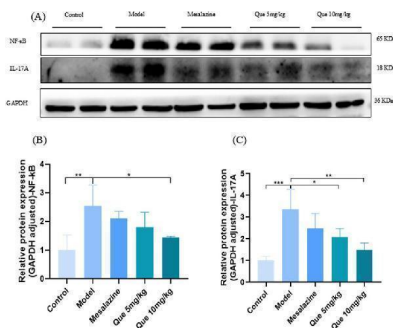
Immunogen	E. coli-derived mouse IL17 recombinant protein (Position: A26-A158).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	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 Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml ELISA (Cap), 1-5ug/ml

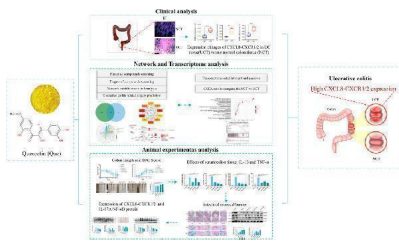
Anti-IL17/IL17a Antibody Picoband® (A00421-2) Images



Western blot analysis of IL17 using anti-IL17 antibody (A00421-2). 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 50ug of sample under reducing conditions. Lane 1: human Jurkat cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA 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-IL17 antigen affinity purified polyclonal antibody (Catalog # A00421-2) 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 1:10000 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 IL17 at approximately 27KD. The expected band size for IL17 is at 17KD.

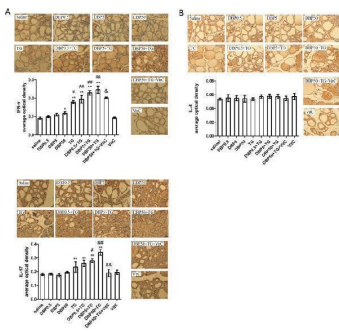


Que decreases the protein expression level of IL-17A and NF-kappaB. (A-C) Protein expression of IL-17A and NF-kappaB in colon of mice (n = 4). * p < 0.05, ** p < 0.01, *** p < 0.001. Index in PubMed under a CC BY license. PMID: 39717557

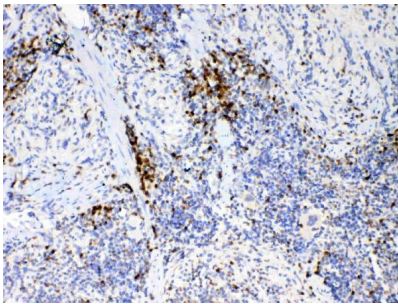


Workflow for analyzing Que's mechanisms in UC treatment. Network pharmacology, in conjunction with transcriptomic methodologies and experimental validation, demonstrated that quercetin alleviated the symptoms associated with DSS-induced colitis. It attenuates the inflammatory response, promotes the repair of colonic mucosal tissues, and elevates the levels of colonic tight junction proteins in mice with ulcerative colitis. These effects may enhance tight junction integrity and restore intestinal barrier function by modulating the IL-17A signaling pathway while simultaneously inhibiting the CXCL8-CXCR1/2 axis. Index in PubMed under a CC BY license. PMID: 39717557

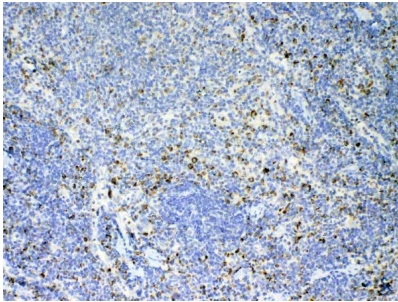
Th1/Th2 imbalance and Th17 immune response. (A) Immunohistochemistry and average optical density for IFN-gamma, F DBP = 5.596 (p = 0.002), F TG = 142.67 (p = 0.000), F DBP*TG = 1.114 (p = 0.351). (B) Immunohistochemistry and average optical density for IL-4, F DBP = 0.537 (p = 0.659), F TG = 1.419 (p = 0.24), F DBP*TG = 0.168 (p = 0.917). (C) Immunohistochemistry and average optical density for IL-17 F DBP = 6.966 (p = 0.001), F TG = 93.46 (p = 0.000), F DBP*TG = 4.136 (p =



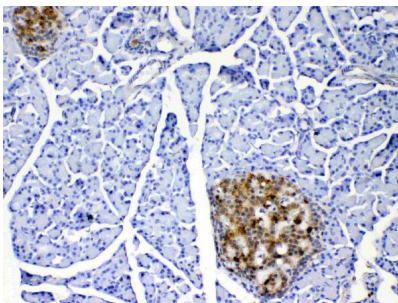
0.011). Magnification = $\times 40$. * $p < 0.05$, ** $p < 0.01$, compared with the saline group; # $p < 0.05$, ## $p < 0.01$, compared with the TG group; & $p < 0.05$, && $p < 0.01$, compared with the DBP50 + TG group. Index in PubMed under a CC BY license. PMID: 29133889



IHC analysis of IL17 using anti-IL17 antibody (A00421-2). IL17 was detected in paraffin-embedded section of mouse spleen tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-IL17 Antibody (A00421-2) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

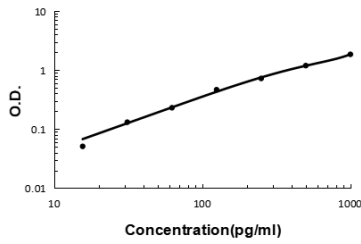


IHC analysis of IL17 using anti-IL17 antibody (A00421-2). IL17 was detected in paraffin-embedded section of rat spleen tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-IL17 Antibody (A00421-2) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



IHC analysis of IL17 using anti-IL17 antibody (A00421-2). IL17 was detected in paraffin-embedded section of rat pancreas tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-IL17 Antibody (A00421-2) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

Sandwich ELISA - Recombinant mouse IL17/IL17a protein standard curve. Use in combination with reagents from Mouse IL17/IL17a ELISA Kit EZ-Set (DIY Antibody Pairs) (EZ0431).



3 Publications Citing This Product

1. PubMed ID: 29133889, Wu Y, Li J, Yan B, Zhu Y, Liu X, Chen M, Li D, Lee CC, Yang X, Ma P. Sci Rep. 2017 Nov 13;7(1):15469. doi: 10.1038/s41598-017-15533-z. Oral exposure to dibutyl phthalate exacerbates chronic lymphocytic thyroiditis through oxidative stress in femal...
2. PubMed ID: 26064167, Gong T, Wang Cf, Yuan Jr, Li Y, Gu Jf, Zhao Bj, Zhang L, Jia Xb, Feng L, Liu Sl. Evid Based Complement Alternat Med. 2015;2015:630760. Doi: 10.1155/2015/630760. Epub 2015 May 3. Inhibition Of Tumor Growth And Immunomodulatory Effects Of Flavonoids...
3. PubMed ID: 25664038, Li Xn, Pan X, Qiu D. Int J Clin Exp Med. 2014 Dec 15;7(12):5324-9. Ecollection 2014. Imbalances Of Th17 And Treg Cells And Their Respective Cytokines In Copd Patients By Disease Stage.

Visit bosterbio.com/anti-il17-picoband-trade-antibody-a00421-2-boster.html to see all 3 publications.

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Anti-IL17/II17a Antibody

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