

Anti-TNF alpha Antibody Picoband®

Catalog Number: A00002-3

About TNF

TNF (Tumor Necrosis Factor alpha) gene encodes a multifunctional proinflammatory cytokine that belongs to the tumor necrosis factor (TNF) superfamily. This cytokine is mainly secreted by macrophages. It can bind to, and thus functions through its receptors TNFRSF1A/TNFR1 and TNFRSF1B/TNFR2. This cytokine is involved in the regulation of a wide spectrum of biological processes including cell proliferation, differentiation, apoptosis, lipid metabolism, and coagulation. This cytokine has been implicated in a variety of diseases, including autoimmune diseases, insulin resistance, and cancer. Knockout studies in mice also suggested the neuroprotective function of this cytokine.

Overview

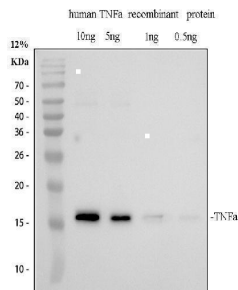
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| Product Name | Anti-TNF alpha Antibody Picoband® |
| Reactive Species | Human |
| Description | Boster Bio Anti-TNF alpha Antibody Picoband® catalog # A00002-3. Tested in ELISA, IHC, WB applications. This antibody reacts with Human. The brand Picoband 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 | 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 | P01375 |

Technical Details

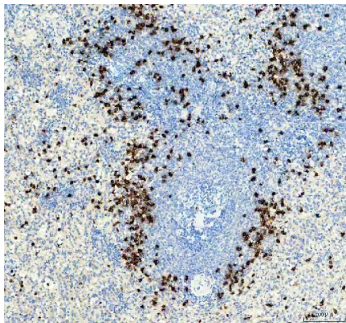
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| Immunogen | E. coli-derived human TNF alpha recombinant protein (Position: V77-L233). |
| Recommended Detection Systems | Boster recommends ECL Plus Western Blotting Substrate (Catalog # AR1196-200) for Western blot., and HRP Conjugated anti-Rabbit 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. |

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| Purification | Immunogen affinity purified. |
| Suggested Dilutions | Western blot, 0.1-0.5ug/ml, Human Immunohistochemistry (Paraffin-embedded Section), 2-5ug/ml, Human ELISA (Cap), 1-5ug/ml, - |

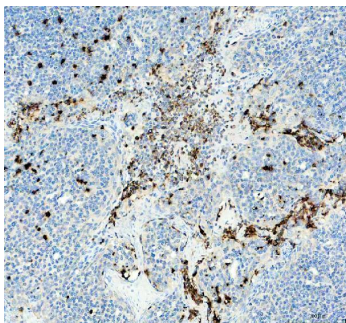
Anti-TNF alpha Antibody Picoband® (A00002-3) Images



Western blot analysis of TNF alpha using anti-TNF alpha antibody (A00002-3). Electrophoresis was performed on a 12% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. Lane 1: recombinant human TNF alpha protein 10 ng, Lane 2: recombinant human TNF alpha protein 5 ng, Lane 3: recombinant human TNF alpha protein 1 ng, Lane 4: recombinant human TNF alpha protein 0.5 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-TNF alpha antigen affinity purified polyclonal antibody (A00002-3) 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 (Catalog # BA1054) at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an ECL Plus Western Blotting Substrate (Catalog # AR1196-200) with Tanon 5200 system. A specific band was detected for TNF alpha at approximately 17 kDa.



IHC analysis of TNF alpha using anti-TNF alpha antibody (A00002-3). TNF alpha was detected in a paraffin-embedded section of human spleen tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-TNF alpha Antibody (A00002-3) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



IHC analysis of TNF alpha using anti-TNF alpha antibody (A00002-3). TNF alpha was detected in a paraffin-embedded section of human tonsil tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-TNF alpha Antibody (A00002-3) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

36 Publications Citing This Product

1. PubMed ID: 22432006, Liu Hp, Gao Zh, Cui Sx, Sun Df, Wang Y, Zhao Cr, Lou Hx, Qu Xj. Plos One. 2012;7(3):E33243. Doi: 10.1371/Journal.Pone.0033243. Epub 2012 Mar 14. Inhibition Of Intestinal Adenoma Formation In Apc(Min/+) Mice By Riccardin D, A Natural Product Derive...

2. PubMed ID: 25317156, Neuroprotective effect of pretreatment with ganoderma lucidum in cerebral ischemia/reperfusion injury in rat hippocampus

3. PubMed ID: 26191204, Hydrogen sulfide accelerates wound healing in diabetic rats

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Anti-TNF alpha Antibody

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