BOSTER
antibody and ELISA experts

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

# Anti-MAX Antibody Picoband™

**Catalog Number:** A03239

## About MAX

MAX (Max protein), also called Myc-associated factor x, is the most conserved dimerization component of the MYC-MAX-MXD1 network of basic helix-loop-helix leucine zipper (bHLHZ) transcription factors that regulate cell proliferation, differentiation, and apoptosis. The conservation of the MAX sequence is particularly high in the bHLHZ domain, which is involved in protein-protein interactions and DNA binding. The MAX gene is located on chromosome 14q23 by fluorescence in situ chromosomal hybridization. Both quasisymmetric heterodimers resemble the symmetric MAX homodimer, albeit with marked structural differences in the coiled-coil leucine zipper regions that explain preferential homo- and heteromeric dimerization of these 3 evolutionarily related DNA-binding proteins. MAX acts as a classic tumor suppressor gene. Normal lymphocytes from patients showed absence of methylation of the MAX promoter and biallelic expression of MAX, which ruled out an imprinting-mediated effect on MAX expression. The ability of these cells to divide, differentiate, and apoptose in the absence of Max demonstrated for the first time that these processes can occur via Max- and possibly Myc-independent mechanisms.

## Overview

| | |
|---|---|
| Product Name | Anti-MAX Antibody Picoband™ |
| Reactive Species | Human, Mouse |
| Description | Boster Bio Anti-MAX Antibody Picoband™ catalog # A03239. Tested in ELISA, Flow Cytometry, IF, ICC, WB applications. This antibody reacts with Human, Mouse. |
| Application | ELISA, Flow Cytometry, IF, ICC, WB |
| Clonality | Polyclonal |
| Formulation | Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na2HPO4. |
| 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 | P61244 |

## Technical Details

| | |
|---|---|
| Immunogen | E. coli-derived human MAX recombinant protein (Position: A30-R106). |
| 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) and ICC. |
| Cross Reactivity | No cross-reactivity with other proteins. |
| Isotype | Rabbit IgG |
| Form | Lyophilized |

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

| | |
|---|---|
| Concentration | Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. |
| Purification | Immunogen affinity purified. |
| Suggested Dilutions | Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.<br>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.<br>Some PubMed article(s) citing the expression level of this target are as follows:<br>Boster Bio's internal QC testing used:<br>Western blot, 0.1-0.5ug/ml<br>Immunocytochemistry/Immunofluorescence, 5 ug/ml<br>Flow Cytometry(Fixed), 1-3 ug/1x$10^6$ cells<br>Direct ELISA, 0.1-0.5ug/ml |

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

# Anti-MAX Antibody Picoband™ (A03239) Images

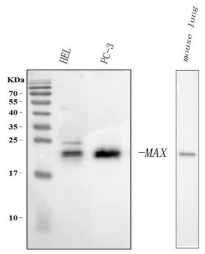


Figure 1. Western blot analysis of MAX using anti-MAX antibody (A03239).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human HEL whole cell lysates,
Lane 2: human PC-3 whole cell lysates,
Lane 3: mouse lung tissue 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-MAX antigen affinity purified polyclonal antibody (Catalog # A03239) 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 MAX at approximately 19-21 kDa. The expected band size for MAX is at 18 kDa.

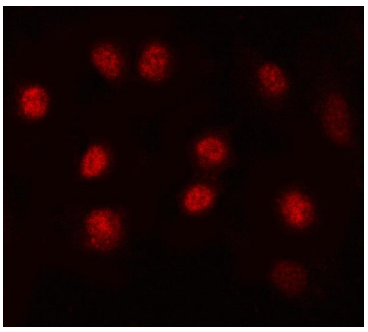

Figure 2. IF analysis of MAX using anti-MAX antibody (A03239).
MAX was detected in an immunocytochemical section of A549 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-MAX Antibody (A03239) overnight at 4°C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

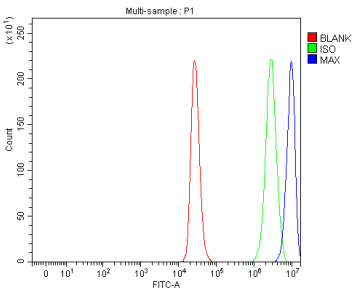


Figure 3. Flow Cytometry analysis of THP-1 cells using anti-MAX antibody (A03239).
Overlay histogram showing THP-1 cells stained with A03239 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-MAX Antibody (A03239, 1 ug/1x$10^6$ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x$10^6$ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x$10^6$) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

## 1 Publications Citing This Product

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

1. PubMed ID: 25627661, Alterations of serum cytokine levels and their relation with inflammatory markers in candidemia

Visit bosterbio.com/anti-max-picoband-trade-antibody-a03239-boster.html to see all 1 publications.