

## Anti-Galectin 3/LGALS3 Antibody Picoband® (monoclonal, 12B12)

Catalog Number: M00621-3

### About LGALS3

SAM domain and HD domain-containing protein 1 is a protein that in humans is encoded by the SAMHD1 gene. This gene may play a role in regulation of the innate immune response. The encoded protein is upregulated in response to viral infection and may be involved in mediation of tumor necrosis factor-alpha proinflammatory responses. Mutations in this gene have been associated with Aicardi-Goutieres syndrome.

### Overview

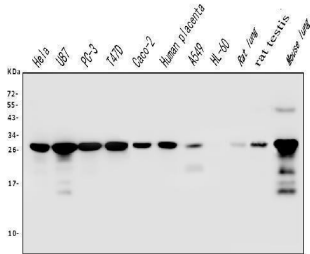
Product Name	Anti-Galectin 3/LGALS3 Antibody Picoband® (monoclonal, 12B12)
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Galectin 3/LGALS3 Antibody Picoband® (monoclonal, 12B12) catalog # M00621-3. Tested in Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, 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	Flow Cytometry, IF, IHC, ICC, WB
Clonality	Monoclonal 12B12
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05mg Na <sub>3</sub> N.
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	Mouse
Uniprot ID	P17931

### Technical Details

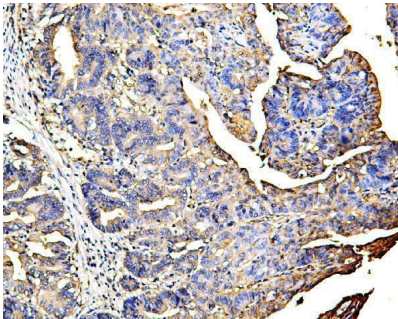
Immunogen	E.coli-derived human Galectin 3 recombinant protein (Position: K139-I250). Human Galectin 3 shares 88% and 84% amino acid (aa) sequence identity with mouse and rat Galectin 3, respectively.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Mouse IgG (EK1001) for Western blot, and HRP Conjugated anti-Mouse IgG Super Vision Assay Kit (SV0001-1) for IHC(P) and ICC.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Mouse IgG2a
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 Immunocytochemistry/Immunofluorescence, 2ug/ml Flow Cytometry (Fixed), 1-3ug/1x10 <sup>6</sup> cells

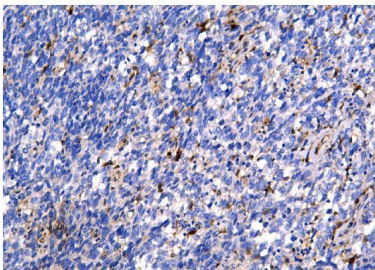
## Anti-Galectin 3/LGALS3 Antibody Picoband® (monoclonal, 12B12) (M00621-3) Images



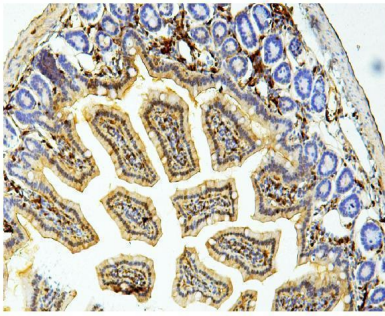
Western blot analysis of Galectin 3/LGALS3 using anti-Galectin 3/LGALS3 antibody (M00621-3). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human HeLa whole cell lysates, Lane 2: human U87 whole cell lysates, Lane 3: human PC-3 whole cell lysates. Lane 4: human T47D whole cell lysates, Lane 5: human CACO-2 whole cell lysates, Lane 6: human placenta tissue lysates, Lane 7: human A549 whole cell lysates, Lane 8: human HL-60 whole cell lysates, Lane 9: rat lung tissue lysates, Lane 10: rat testis tissue lysates, Lane 11: mouse lung tissue 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 mouse anti-Galectin 3/LGALS3 antigen affinity purified monoclonal antibody (Catalog # M00621-3) 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-mouse 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 # EK1001) with Tanon 5200 system. A specific band was detected for Galectin 3/LGALS3 at approximately 28KD. The expected band size for Galectin 3/LGALS3 is at 28KD.



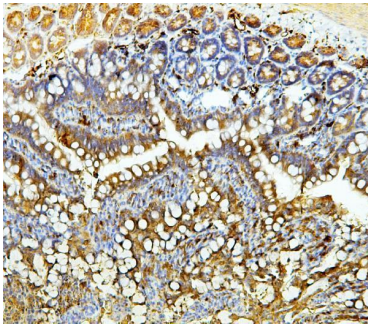
IHC analysis of Galectin 3/LGALS3 using anti Galectin 3/LGALS3 antibody (M00621-3). Galectin 3/LGALS3 was detected in paraffin-embedded section of human intestinal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml mouse anti-Galectin 3/LGALS3 Antibody (M00621-3) overnight at 4°C. Biotinylated goat anti-mouse 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 # SA1021) with DAB as the chromogen.



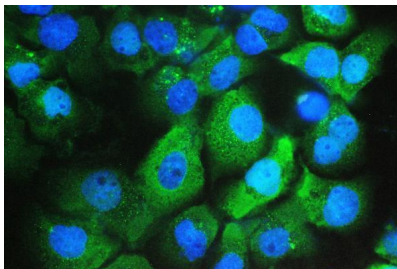
IHC analysis of Galectin 3/LGALS3 using anti Galectin 3/LGALS3 antibody (M00621-3). Galectin 3/LGALS3 was detected in paraffin-embedded section of human melanoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml mouse anti-Galectin 3/LGALS3 Antibody (M00621-3) overnight at 4°C. Biotinylated goat anti-mouse 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 # SA1021) with DAB as the chromogen.



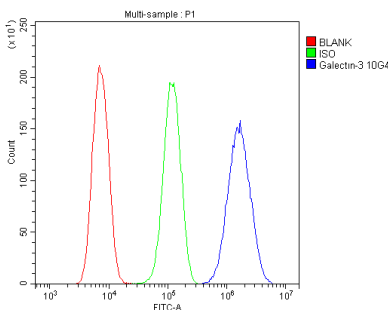
IHC analysis of Galectin 3/LGALS3 using anti Galectin 3/LGALS3 antibody (M00621-3). Galectin 3/LGALS3 was detected in paraffin-embedded section of mouse small intestine tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml mouse anti-Galectin 3/LGALS3 Antibody (M00621-3) overnight at 4°C. Biotinylated goat anti-mouse 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 # SA1021) with DAB as the chromogen.



IHC analysis of Galectin 3/LGALS3 using anti Galectin 3/LGALS3 antibody (M00621-3). Galectin 3/LGALS3 was detected in paraffin-embedded section of rat small intestine tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml mouse anti-Galectin 3/LGALS3 Antibody (M00621-3) overnight at 4°C. Biotinylated goat anti-mouse 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 # SA1021) with DAB as the chromogen.

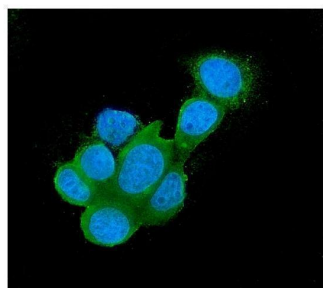


IF analysis of Galectin 3/LGALS3 using anti-Galectin 3/LGALS3 antibody (M00621-3). Galectin 3/LGALS3 was detected in immunocytochemical section of A431 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2ug/mL mouse anti-Galectin 3/LGALS3 Antibody (M00621-3) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Mouse IgG (BA1126) was used as secondary antibody at 1:100 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 U2OS cells using anti-Galectin 3/LGALS3 antibody (M00621-3). Overlay histogram showing U2OS cells stained with M00621-3 (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 mouse anti-Galectin 3/LGALS3 Antibody (M00621-3, 1ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

IF analysis of Galectin 3/LGALS3 using anti-Galectin



3/LGALS3 antibody (M00621-3). Galectin 3/LGALS3 was detected in immunocytochemical section of MCF-7 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 2ug/mL mouse anti-Galectin 3/LGALS3 Antibody (M00621-3) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Mouse IgG (BA1126) was used as secondary antibody at 1:100 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.

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Anti-Galectin 3/LGALS3 Antibody (monoclonal, 12B12)

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