

Anti-Galectin 1/Lgals1 Antibody Picoband™

Catalog Number: A00470

About Lgals1

Galectin-1 is a protein that in humans is encoded by the LGALS1 gene. The galectins are a family of beta-galactoside-binding proteins implicated in modulating cell-cell and cell-matrix interactions. Galectin-1 may act as an autocrine negative growth factor that regulates cell proliferation. Galectin-1 expression in Hodgkin Lymphoma has also been shown to mediate immunosuppression of CD8+ T-cells. It is thought to play a role in creating immune tolerance in pregnancy. It has been found that Galectin-1-mediated production of IL6 may assist in augmenting the innate immune response against NiV. Galectin-1 may also be a significant factor that augments the efficiency of the HIV-1 infection process.

Overview

Product Name	Anti-Galectin 1/Lgals1 Antibody Picoband™
Reactive Species	Mouse, Rat
Description	Boster Bio Anti-Galectin 1/Lgals1 Antibody Picoband™ catalog # A00470. Tested in ELISA, IHC, WB applications. This antibody reacts with Mouse, Rat.
Application	ELISA, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
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	Lgals1: P16045

Technical Details

Immunogen	E. coli-derived mouse Galectin 1 recombinant protein (Position: A2-E135).
Predicted Reactive Species	Chicken
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	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Western blot, 0.1-0.5ug/ml Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml ELISA (Cap), 1-5ug/ml

Anti-Galectin 1/Lgals1 Antibody Picoband™ (A00470) Images

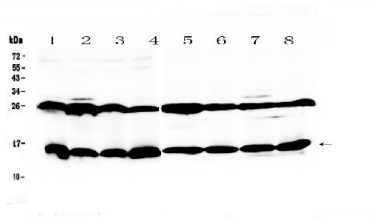


Figure 1. Western blot analysis of Galectin 1 using anti-Galectin 1 antibody (A00470). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: mouse thymus tissue lysates,
Lane 2: mouse kidney tissue lysates,
Lane 3: mouse testis tissue lysates,
Lane 4: mouse ovary tissue lysates,
Lane 5: rat heart tissue lysates,
Lane 6: rat skeletal muscle tissue lysates,
Lane 7: rat gaster tissue lysates,
Lane 8: rat testis 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 rabbit anti-Galectin 1 antigen affinity purified polyclonal antibody (Catalog # A00470) at 0.5 ug/mL overnight at 4 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 Galectin 1 at approximately 15KD. The expected band size for Galectin 1 is at 15KD.

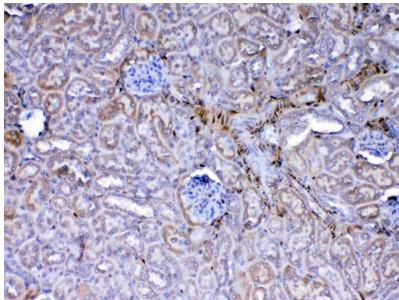


Figure 2. IHC analysis of Galectin 1 using anti-Galectin 1 antibody (A00470).

Galectin 1 was detected in paraffin-embedded section of mouse kidney 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-Galectin 1 Antibody (A00470) 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.

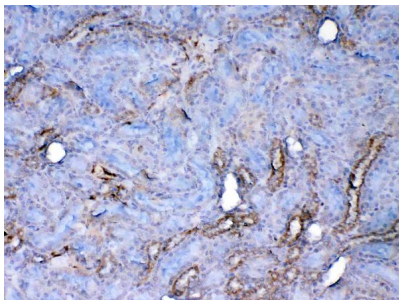


Figure 3. IHC analysis of Galectin 1 using anti-Galectin 1 antibody (A00470).

Galectin 1 was detected in paraffin-embedded section of rat kidney 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-Galectin 1 Antibody (A00470) 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.

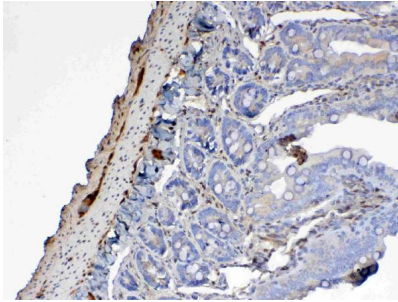


Figure 4. IHC analysis of Galectin 1 using anti-Galectin 1 antibody (A00470). Galectin 1 was detected in paraffin-embedded section of rat small intestine tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Galectin 1 Antibody (A00470) 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.

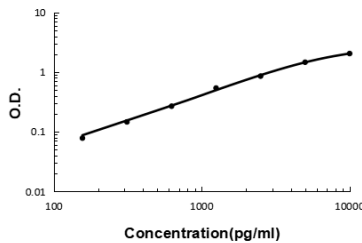


Figure 5. Sandwich ELISA - Recombinant mouse Galectin 1/Lgals1 protein standard curve. Use in combination with reagents from Mouse Galectin 1/Lgals1 ELISA Kit EZ-Set (DIY Antibody Pairs) (EZ0763).

2 Publications Citing This Product

1. PubMed ID: 10.1186/s13071-020-04309-6, Trichinella spiralis co-infection exacerbates Plasmodium berghei malaria-induced hepatopathy
2. PubMed ID: 32231658, Ye Z, Huang S, Zhang Y, Mei X, Zheng H, Li M, Chen J, Lu F. Galectins, Eosinophiles, and Macrophages May Contribute to Schistosoma japonicum Egg-Induced Immunopathology in a Mouse Model. Front Immunol. 2020 Mar 13;11:146. doi:10.3389/fimmu.2020.00146. PMID:32231658;

Visit bosterbio.com/anti-galectin-1-picoband-trade-antibody-a00470-boster.html to see all 2 publications.

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