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Anti-Sca1/Ly6A/E Antibody Picoband™

Catalog Number: A30403

About Ly6a

Stem cell antigen-1 (Sca-1) is a mouse glycosyl phosphatidylinositol-anchored protein and a cell surface marker found on hematopoietic stem cells (HSCs). It is encoded by the strain-specific Ly-6 E/A allelic gene. Sca-1 has been discovered in several non hematopoietic tissues and can be used to enrich progenitor cell populations other than HSC. It is suggested that Sca-1 could be involved in regulating both B and T cell activation.

Overview

Product Name	Anti-Sca1/Ly6A/E Antibody Picoband™
Reactive Species	Mouse
Description	Boster Bio Anti-Sca1/Ly6A/E Antibody Picoband™ catalog # A30403. Tested in Flow Cytometry, IHC, WB applications. This antibody reacts with Mouse.
Application	Flow Cytometry, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 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	P05533

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence in the middle region of mouse Sca1/Ly6A/E.
Predicted Reactive Species	Hepatitis Virus
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.

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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, Mouse Immunohistochemistry (Paraffin-embedded Section), 2-5ug/ml, Mouse Flow Cytometry, 1-3ug/1x10^6 cells, Mouse

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Anti-Sca1/Ly6A/E Antibody Picoband™ (A30403) Images

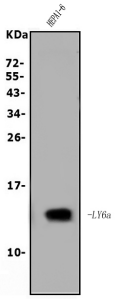

Figure 1. Western blot analysis of Sca1/Ly6A/E using anti-Sca1/Ly6A/E antibody (A30403).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: mouse HEPA1-6 whole 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-Sca1/Ly6A/E antigen affinity purified polyclonal antibody (Catalog # A30403) 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 Sca1/Ly6A/E at approximately 14KD. The expected band size for Sca1/Ly6A/E is at 14KD.

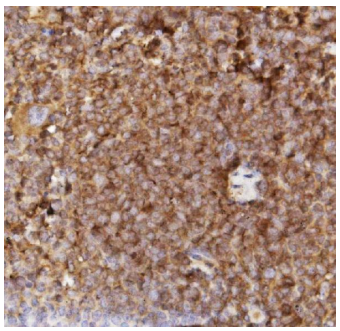

Figure 2. IHC analysis of Sca1/Ly6A/E using anti-Sca1/Ly6A/Eantibody (A30403).
Sca1/Ly6A/E was detected in paraffin-embedded section of mouse spleen tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Sca1/Ly6A/E Antibody (A30403) 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 Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

1 Publications Citing This Product

1. PubMed ID: 22319244, BMP9-Induced Osteogenetic Differentiation and Bone Formation of Muscle-Derived Stem Cells

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