

Anti-SCF/KITLG Antibody Picoband®

Catalog Number: RP1010

About KITLG

Stem Cell Factor (also known as SCF, kit-ligand, KL, or steel factor) is a cytokine that binds to the c-Kit receptor (CD117). The SCF gene is mapped to 12q21.32. SCF can exist both as a transmembrane protein and a soluble protein. This cytokine plays an important role in hematopoiesis (formation of blood cells), spermatogenesis, and melanogenesis. SCF may be used along with other cytokines to culture HSCs and hematopoietic progenitors. The expansion of these cells ex-vivo (outside the body) would allow advances in bone-marrow transplantation, in which HSCs are transferred to a patient to re-establish blood formation. One of the problems of injecting SCF for therapeutic purposes is that SCF activates mast cells. The injection of SCF has been shown to cause allergic-like symptoms and the proliferation of mast cells and melanocytes.

Overview

Product Name	Anti-SCF/KITLG Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-SCF/KITLG Antibody catalog # RP1010. 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	ELISA, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ . Carrier free (No BSA) form available in stock. If you want this antibody carrier free please specify "Carrier Free" or "No BSA" in your order note.
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	P21583

Technical Details

Immunogen	E. coli-derived human SCF recombinant protein (Position: E26-A190).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
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	Western blot, 0.1-0.5ug/ml, Human Immunohistochemistry (Paraffin-embedded Section), 2-5ug/ml, Human ELISA, 0.1-0.5ug/ml, -

Anti-SCF/KITLG Antibody Picoband® (RP1010) Images

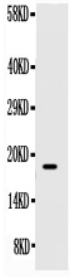


Figure. Western blot analysis of SCF using anti-SCF antibody (RP1010). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane : Recombinant Human SCF Protein 0.5ng, 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-SCF antigen affinity purified polyclonal antibody (Catalog # RP1010) 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 1:10000 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 SCF at approximately 18KD. The expected band size for SCF is at 18KD.



IHC analysis of SCF using anti-SCF antibody (RP1010). SCF 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-SCF Antibody (RP1010) 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.

2 Publications Citing This Product

1. PubMed ID: 28033308, Effects of Polysaccharide of Gastrodia Elata Blume and Electro-Acupuncture on Expressions of Brain-Derived Neurotrophic Factor and Stem Cell Factor Protein in Caudate Putamen of Focal Cerebral Ischemia Rats
2. PubMed ID: 29246405, Selective tropism of liver stem cells to hepatocellular carcinoma in vivo.

Visit bosterbio.com/anti-human-scf-antibody-rp1010-boster.html to see all 2 publications.

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