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antibody and ELISA experts

BOSTER BIOLOGICAL TECHNOLOGY
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Anti-SCF KITLG Antibody

Catalog Number: A01254

About KITLG

Stem cell factor (SCF) is the ligand of the c-Kit oncogene and is expressed by various structural and inflammatory cells in the airways. Binding of SCF by the c-Kit receptor leads to homodimerization of the receptor and the activation of signalling pathways such as PI-3, PLC-gamma, Jak/STAT, and MAP kinase pathways. SCF expression leads to the induction of mast cell survival and the expression and release of histamine, pro-inflammatory cytokines and chemokines. The inhibition of the SCF/c-Kit pathway leads to a decrease in histamine levels, mast cell and eosinophil infiltration, IL-4 production and airway hyperresponsiveness, suggesting this pathway may be a useful therapeutic target in inflammatory diseases such as asthma. At least two isoforms of SCF are known to exist.

Overview

Product Name	Anti-SCF KITLG Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-SCF KITLG Antibody (Catalog # A01254). Tested in ELISA, WB, IHC-P, IF applications. This antibody reacts with Human, Mouse, Rat.
Application	ELISA, IF, IHC-P, WB
Clonality	Polyclonal
Formulation	SCF Antibody is supplied in PBS containing 0.02% sodium azide.
Storage Instructions	Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.
Host	Rabbit
Uniprot ID	P21583

Technical Details

Immunogen	Anti-SCF antibody was raised against a peptide corresponding to 18 amino acids near the center of human SCF. The immunogen is located within amino acids 100-150 of SCF.
Predicted Reactive Species	Bovine
Isotype	IgG
Form	Liquid
Concentration	1 mg/mL
Purification	SCF Antibody is affinity chromatography purified via peptide column.

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Suggested Dilutions	WB: 1-2 ug/mL; IHC: 2.5 ug/mL; IF: 20 ug/mL. Antibody validated: Western Blot in human, mouse and rat samples; Immunohistochemistry in mouse samples; Immunofluorescence in human samples. All other applications and species not yet tested. Optimal dilutions for each application should be determined by the researcher.

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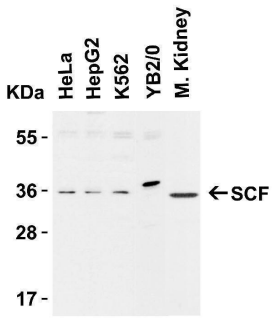
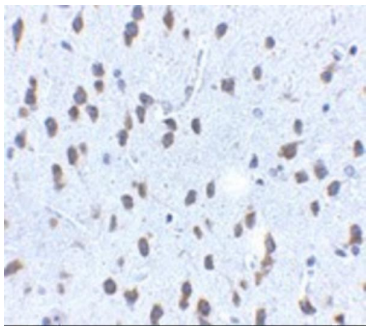
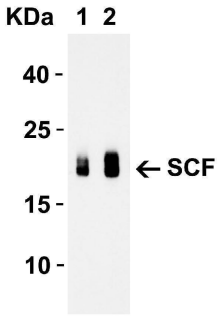
Anti-SCF KITLG Antibody (A01254) Images



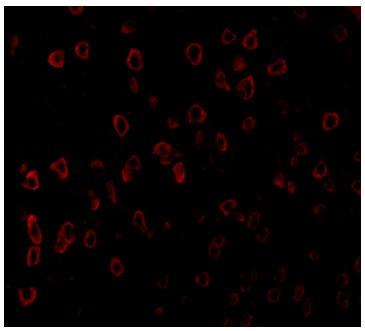
Western Blot Validation in Cell Lines and Tissues of Human, Mouse and Rat Loading: 15 ug of lysates per lane. Antibodies: SCF A01254 (1 ug/mL), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



Immunohistochemistry Validation of SCF in Mouse Brain Tissue Immunohistochemical analysis of paraffin-embedded mouse brain tissue using anti-SCF antibody (A01254) at 2.5 ug/ml. Tissue was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody overnight at 4 ˚C. A goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.



Western Blot Validation with Recombinant Protein Loading: 30 ng of human SCF recombinant protein per lane. Antibodies: SCF A01254 (Lane 1: 1 ug/mL and Lane 2: 2 ug/mL), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution. Observed at around 20kD.



Immunofluorescence Validation of SCF in Human Brain Tissue Immunofluorescent analysis of 4% paraformaldehyde-fixed human brain tissue labeling SCF with A01254 at 20 ug/mL, followed by goat anti-rabbit IgG secondary antibody at 1/500 dilution (red).

Regulation Validation of SCF in Streptozotocin (STZ)-induced Diabetic Mice (Zhang et al., 2016) WB analysis showed protein expression level of SCF detected by anti-SCF antibody (A01254) in gastric smooth muscle was significantly decreased in STZ-induced diabetic mice as compared to the control.

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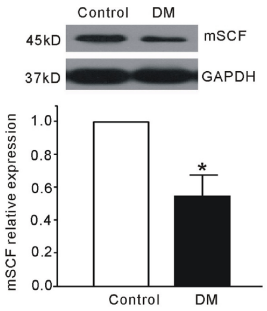
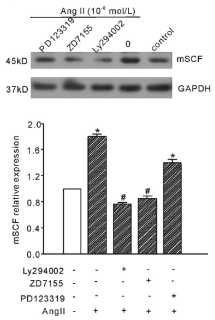
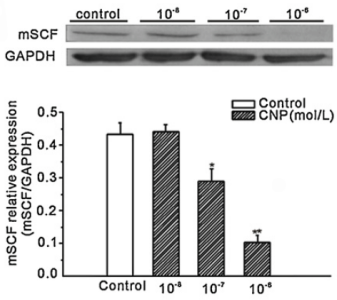




Regulated Expression Validation of SCF in Gastric Smooth Muscle Cells (GSMCs) of Mice (Zhang et al., 2016) WB analysis of protein expression level of SCF detected by anti-SCF antibody (A01254). GSMCs were treated with PI3K inhibitor (LY294002), AT1R inhibitor (ZD7155) and AT2R inhibitor (PD123319) before Ang II treatment. Ang II (10-8mol/L) significantly increased SCF protein expression, which was reduced by treatment of LY294002 and ZD7155.



Regulated Expression Validation of SCF in GSMCs of Normal Mice (Wu et al., 2013) WB analysis of protein expression level of SCF detected by anti-SCF antibody (A01254). GSMCs were treated with C-type natriuretic peptide (CNP) at different doses for 48hr. CNP(10-7mol/L and 10-6mol/L) significantly decreased SCF protein expression level as compared to the control group.

1 Publications Citing This Product

1. PubMed ID: 10.3892/mmr.2018.8776, Tranilast prevents renal interstitial fibrosis by blocking mast cell infiltration in a rat model of diabetic kidney disease

Visit bosterbio.com/anti-scf-kitlg-antibody-a01254-boster.html to see all 1 publications.

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