10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-SCF Picoband Antibody
Catalog # ABO12935

Specification

Anti-SCF Picoband Antibody - Product Information

Application	**WB, IHC**
Primary Accession	KITLG: P21583
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for SCF detection. Tested with WB, IHC-P, ELISA(Cap) in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-SCF Picoband Antibody - Additional Information

Application Details
Western blot, 0.1-0.5 µg/ml

 Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml

 ELISA(Cap), 0.1-0.5 µg/ml

Subcellular Localization
Isoform 1: Cell membrane; Single-pass type I membrane protein.

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
E. coli-derived human SCF recombinant protein (Position: E26-A190).

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins.

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time. Avoid repeated freezing and thawing.**

Anti-SCF Picoband Antibody - Protein Information

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Anti-SCF Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-SCF Picoband Antibody - Images

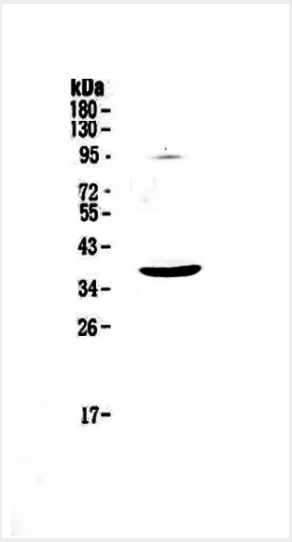


Figure 1. Western blot analysis of SCF using anti-SCF antibody (ABO12935). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: mouse HEPA1-6 whole 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-SCF antigen affinity purified polyclonal antibody (Catalog # ABO12935) at 0.5 ug/mL overnight at 4â„ƒ, 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 with Tanon 5200 system. A specific band was detected for SCF at approximately 37KD. The expected band size for SCF is at 31KD.

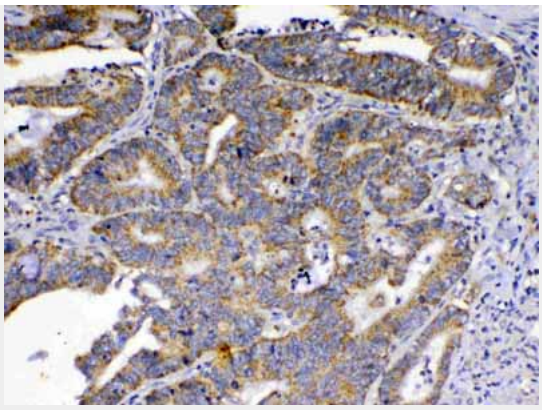


Figure 2. IHC analysis of SCF using anti-SCF antibody (ABO12935).SCF was detected in paraffin-embedded section of human colon cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-SCF Antibody (ABO12935) overnight at 4â„ƒ. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37â„ƒ. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

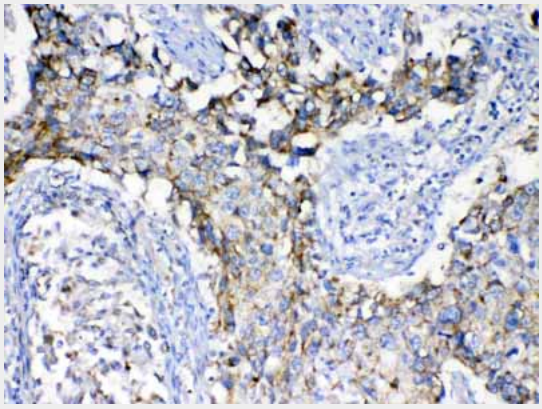


Figure 3. IHC analysis of SCF using anti-SCF antibody (ABO12935).SCF was detected in paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-SCF Antibody (ABO12935) overnight at 4â„ƒ. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37â„ƒ. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

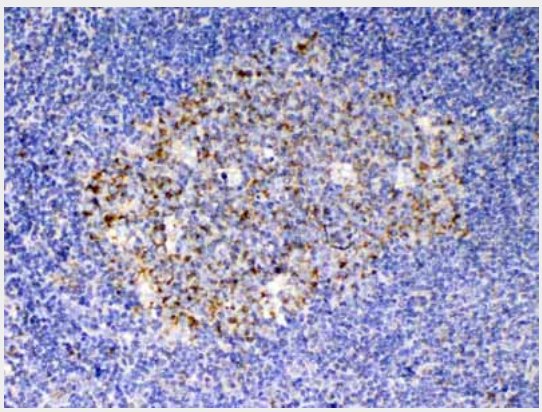


Figure 4. IHC analysis of SCF using anti-SCF antibody (ABO12935).SCF was detected in

paraffin-embedded section of human tonsil . 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-SCF Antibody (ABO12935) overnight at 4â„ƒ. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37â„ƒ. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

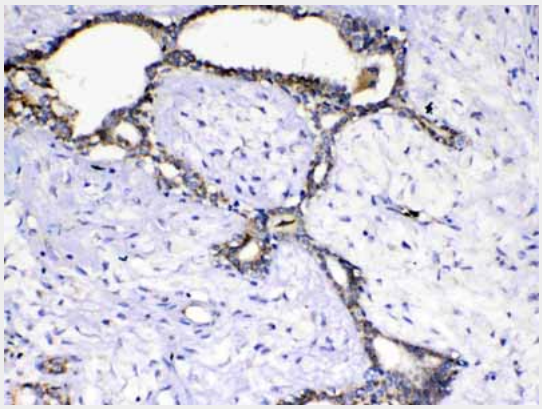


Figure 5. IHC analysis of SCF using anti-SCF antibody (ABO12935).SCF was detected in paraffin-embedded section of human mammary cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-SCF Antibody (ABO12935) overnight at 4â„ƒ. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37â„ƒ. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Anti-SCF Picoband Antibody - Background

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.