

Datasheet for ABIN5519022

**anti-KIT Ligand antibody (AA 26-190)****5** Images**3** Publications[Go to Product page](#)

## Overview

Quantity:	100 µg
Target:	KIT Ligand (KITLG)
Binding Specificity:	AA 26-190
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This KIT Ligand antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

## Product Details

Purpose:	Rabbit IgG polyclonal antibody for SCF detection. Tested with WB, IHC-P, ELISA(Cap) in Human,Mouse,Rat.
Immunogen:	E. coli-derived huamn SCF recombinant protein (Position: E26-A190).
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	<p>Rabbit IgG polyclonal antibody for SCF detection. Tested with WB, IHC-P, ELISA(Cap) in Human,Mouse,Rat.</p> <p>Gene Name: KIT ligand</p> <p>Protein Name: Kit ligand</p>
Purification:	Immunogen affinity purified.

## Target Details

Target:	KIT Ligand (KITLG)
Alternative Name:	KITLG ( <a href="#">KITLG Products</a> )
Background:	<p>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.</p> <p>Synonyms: Kit ligand, Mast cell growth factor, MGF, Stem cell factor, SCF, c-Kit ligand, Soluble KIT ligand, sKITLG, KITLG, MGF, SCF</p>
Gene ID:	4254
UniProt:	<a href="#">P21583</a>
Pathways:	<a href="#">RTK Signaling</a> , <a href="#">Fc-epsilon Receptor Signaling Pathway</a> , <a href="#">EGFR Signaling Pathway</a> , <a href="#">Neurotrophin Signaling Pathway</a>

## Application Details

Application Notes:	Notes: Tested Species: Species with positive results. Other applications have not been tested. Optimal dilutions should be determined by end users.
Comment:	Booster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (ABIN921124) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Restrictions:	For Research Use only

## Handling

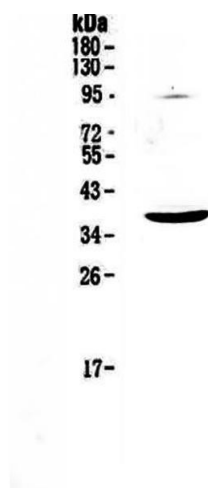
Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL

## Handling

Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C, -20 °C
Storage Comment:	At -20°C for one year. After reconstitution, 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.

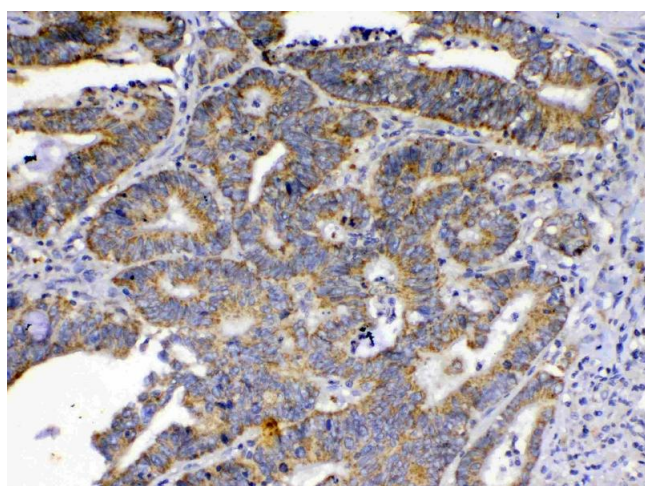
## Publications

Product cited in:	<p>Li, Wu, Miao, Xiong et al.: "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 ..." in: <b>Medical science monitor basic research</b>, Vol. 22, pp. 175-180, (2017) (<a href="#">PubMed</a>).</p> <p>Jeng, Jeng, Jeng, Sheen, Li, Lu, Chang: "Tropism of liver epithelial cells toward hepatocellular carcinoma in vitro and in vivo with altering gene expression of cancer stem cells." in: <b>American journal of surgery</b>, Vol. 215, Issue 4, pp. 735-743, (2017) (<a href="#">PubMed</a>).</p> <p>Zhong, He, Yin, Deng, Cheng: "Selective tropism of liver stem cells to hepatocellular carcinoma in vivo." in: <b>World journal of gastroenterology</b>, Vol. 13, Issue 28, pp. 3886-91, (2007) (<a href="#">PubMed</a>).</p>
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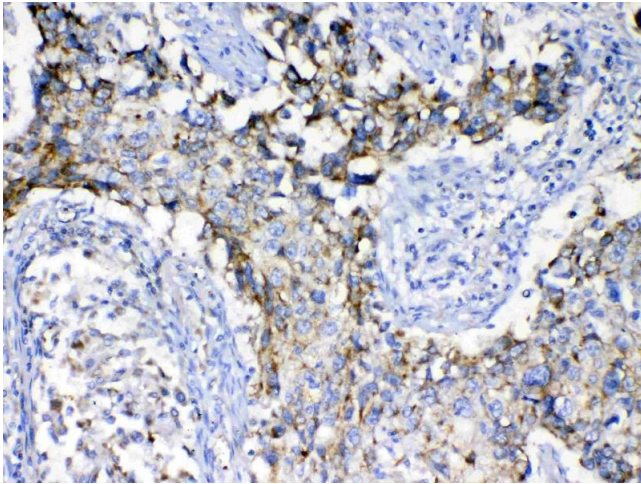
### Western Blotting

**Image 1.** Western blot analysis of SCF using anti-SCF antibody. 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 # ) 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 37KD. The expected band size for SCF is at 31KD.



### Immunohistochemistry

**Image 2.** IHC analysis of SCF using anti-SCF antibody. 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 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.



#### Immunohistochemistry

**Image 3.** IHC analysis of SCF using anti-SCF antibody .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 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.

Please check the [product details page](#) for more images. Overall 5 images are available for ABIN5519022.