

**Anti-SCF Antibody**  
**Catalog # ABO10882****Specification**

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**Anti-SCF Antibody - Product Information**

Application	<b>WB, IHC-P</b>
Primary Accession	<a href="#">P21583</a>
Host	<b>Rabbit</b>
Reactivity	<b>Human</b>
Clonality	<b>Polyclonal</b>
Format	<b>Lyophilized</b>

**Description**

Rabbit IgG polyclonal antibody for Kit ligand(KITLG) detection. Tested with WB, IHC-P in Human.

**Reconstitution**

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

**Anti-SCF Antibody - Additional Information**

**Gene ID** 4254

**Other Names**

Kit ligand, Mast cell growth factor, MGF, Stem cell factor, SCF, c-Kit ligand, Soluble KIT ligand, sKITLG, KITLG, MGF, SCF

**Calculated MW**

30899 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human<br>

**Subcellular Localization**

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

**Protein Name**

Kit ligand

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the N-terminus of human SCF(26-44aa DEGICRNRVTNNVKDVTCLV).

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

Storage

**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.**

#### **Sequence Similarities**

Belongs to the SCF family.

### **Anti-SCF Antibody - Protein Information**

**Name** KITLG ([HGNC:6343](#))

**Synonyms** MGF, SCF

#### **Function**

Ligand for the receptor-type protein-tyrosine kinase KIT. Plays an essential role in the regulation of cell survival and proliferation, hematopoiesis, stem cell maintenance, gametogenesis, mast cell development, migration and function, and in melanogenesis. KITLG/SCF binding can activate several signaling pathways. Promotes phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase, and subsequent activation of the kinase AKT1. KITLG/SCF and KIT also transmit signals via GRB2 and activation of RAS, RAF1 and the MAP kinases MAPK1/ERK2 and/or MAPK3/ERK1. KITLG/SCF and KIT promote activation of STAT family members STAT1, STAT3 and STAT5. KITLG/SCF and KIT promote activation of PLCG1, leading to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate. KITLG/SCF acts synergistically with other cytokines, probably interleukins.

#### **Cellular Location**

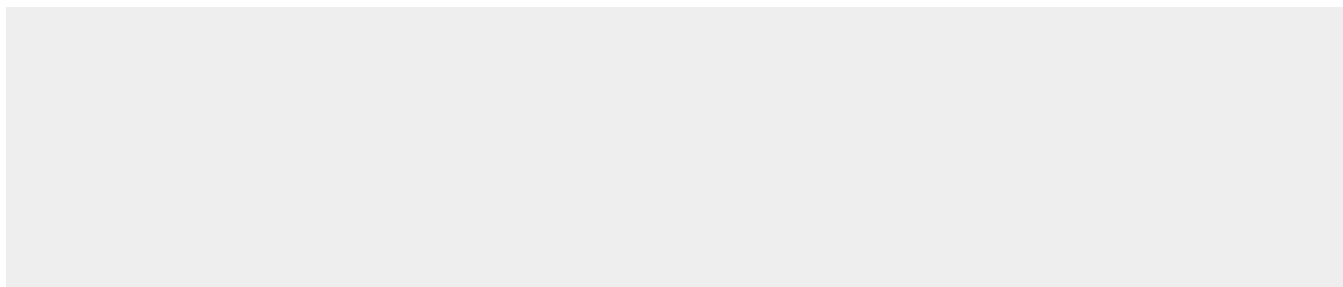
[Isoform 1]: Cell membrane; Single-pass type I membrane protein [Soluble KIT ligand]: Secreted.

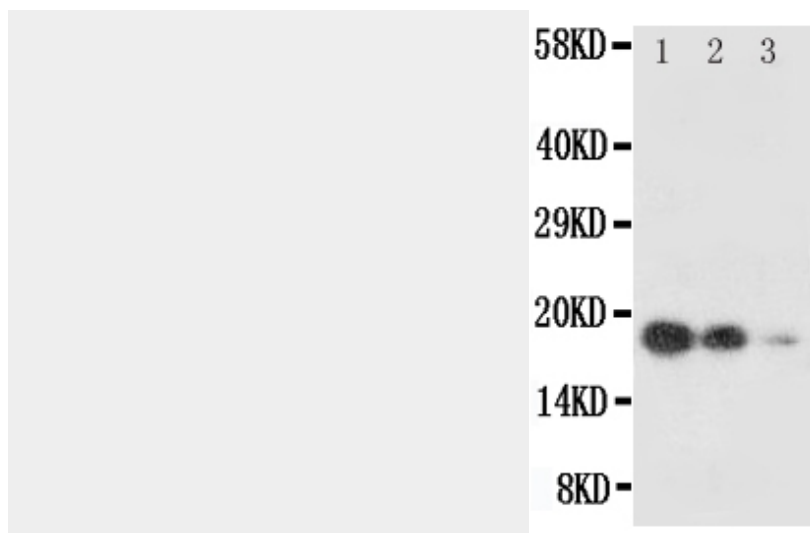
### **Anti-SCF Antibody - Protocols**

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

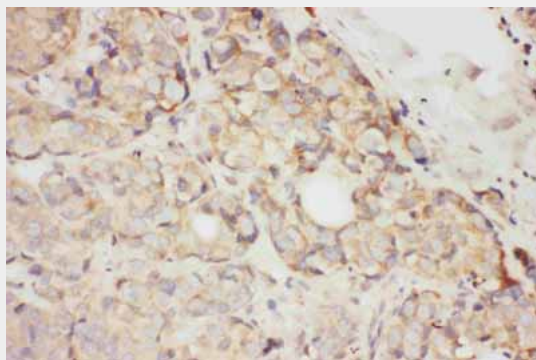
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **Anti-SCF Antibody - Images**





Anti-SCF antibody, ABO10882, Western blotting All lanes: Anti SCF (ABO10882) at 0.5ug/ml  
Lane 1: Recombinant Human SCF Protein 10ng  
Lane 2: Recombinant Human SCF Protein 5ng  
Lane 3: Recombinant Human SCF Protein 2.5ng  
Predicted bind size: 18.4KD  
Observed bind size: 18.4KD



Anti-SCF antibody, ABO10882, IHC(P) IHC(P): Human Mammary Cancer Tissue

### Anti-SCF 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). SCF can exist both as a transmembrane protein and a soluble protein. SCF is localized to the long arm of human chromosome 12, between 12q14.3 and 12qter. SCF plays a role in the regulation of HSCs in the stem cell niche in the bone marrow. SCF has been shown to increase the survival of HSCs in vitro and contributes to the self renewal and maintenance of HSCs in-vivo. HSCs at all stages of development express the same levels of the receptor for SCF(c-Kit). The stromal cells that surround HSCs are a component of the stem cell niche, and they release a number of ligands, including SCF.