

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

Anti-SCF Antibody - Product Information

Application	WB, IHC-P
Primary Accession	P21583
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

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
Western blot, 0.1-0.5 µg/ml, Human

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 Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

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

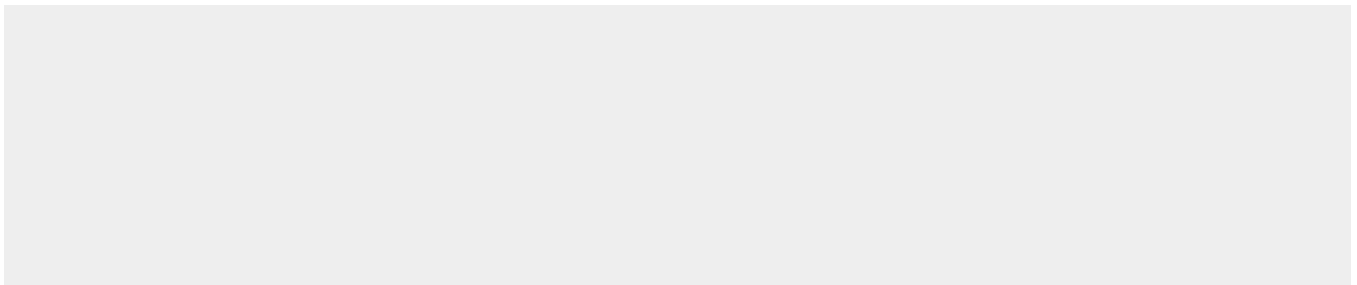
[Isoform 1]: Cell membrane; Single-pass type I membrane protein [Soluble KIT ligand]: Secreted.

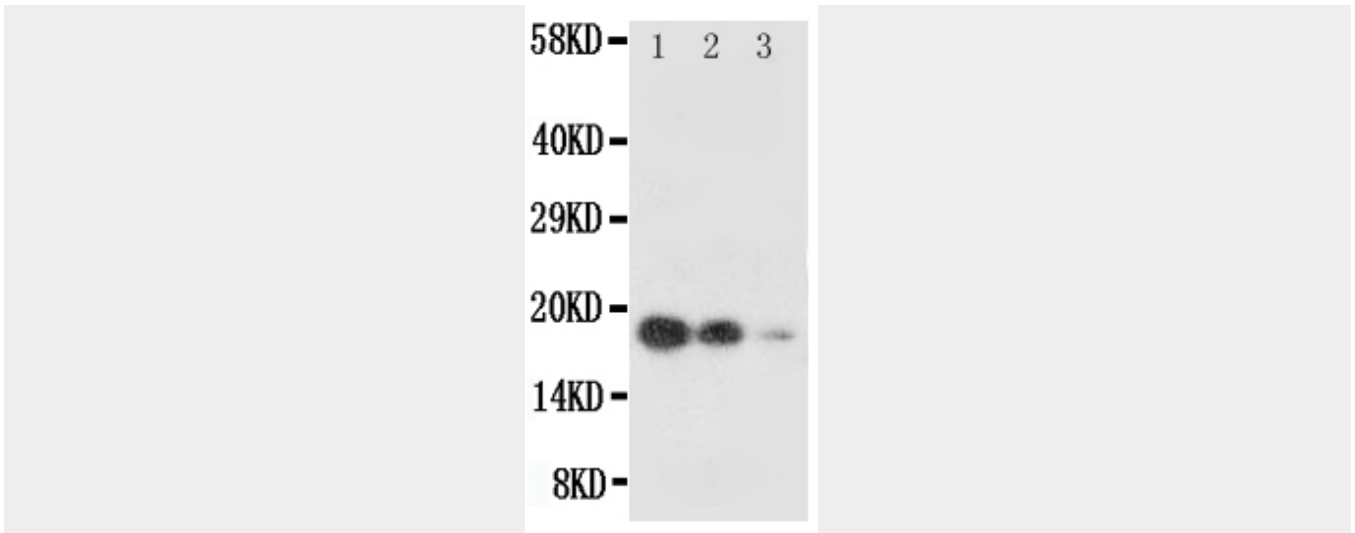
Anti-SCF Antibody - Protocols

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

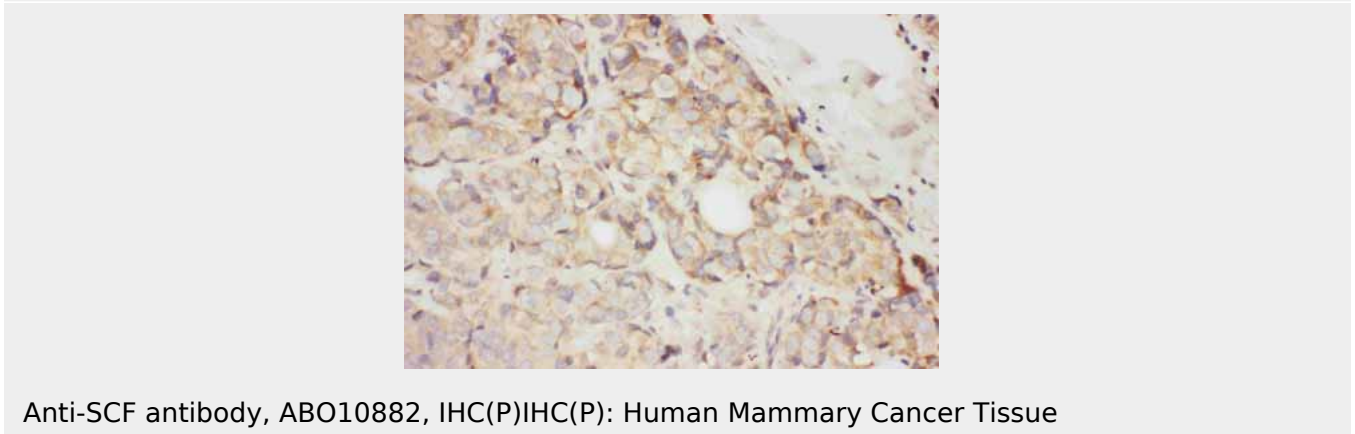
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

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.