

Anti-SCF Antibody

Catalog # ABO10882

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.

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
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.
Source	Eukaryota
Protein Name	Kit ligand
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg NaN ₃ .
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.

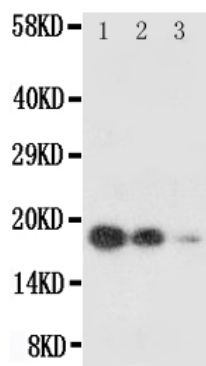
Protein Information

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.

Background

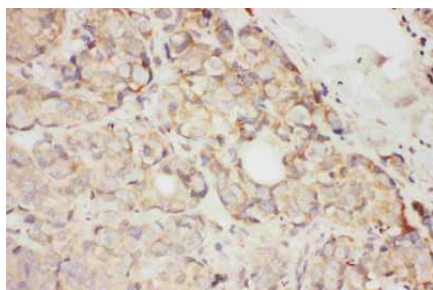
Stem Cell Factor(also known as SCF, kit-ligand, KL, or steel factor) is a cytokine that binds to the c-Kit receptor(CD117). SCF can exist both as a transmembrane protein and a soluble protein. SCF is localized to the long arm of human chromosome 12, between 12q14.3 and 12qter. SCF plays a role in the 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.

Images



Anti-SCF antibody, ABO10882, Western blottingAll lanes:
Anti SCF (ABO10882) at 0.5ug/mlLane 1: Recombinant Human SCF Protein 10ngLane 2: Recombinant Human SCF Protein 5ngLane 3: Recombinant Human SCF Protein 2.5ngPredicted bind size: 18.4KDObserved bind size: 18.4KD

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



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.