

# Product datasheet

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ARG40429 anti-SCF antibody

Package: 100 μl Store at: -20°C

### **Summary**

Product Description Rabbit Polyclonal antibody recognizes SCF

Tested Reactivity Hu

Tested Application FACS, ICC/IF, IHC-P, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name SCF

Species Human

Immunogen Synthetic peptide derived from Human SCF.

Conjugation Un-conjugated

Alternate Names SCF; SHEP7; MGF; FPHH; sKITLG; Stem cell factor; KL-1; Kitl; Kit ligand; Mast cell growth factor; c-Kit

ligand; FPH2; SF

### **Application Instructions**

| Application table | Application  | Dilution        |
|-------------------|--|-----------------|
|                   | FACS   | Assay-dependent |
|                   | ICC/IF   | Assay-dependent |
|                   | IHC-P  | 1:50 - 1:200    |
|                   | WB   | 1:500 - 1:2000  |
| Application Note  | * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. |                 |

### **Properties**

Form Liquid

Purification Affinity purified.

Buffer PBS (pH 7.4), 0.02% Sodium azide and 50% Glycerol.

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

**Note** For laboratory research only, not for drug, diagnostic or other use.

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#### Bioinformation

KITLG Gene Symbol

Gene Full Name KIT ligand

Background This gene encodes the ligand of the tyrosine-kinase receptor encoded by the KIT locus. This ligand is a

pleiotropic factor that acts in utero in germ cell and neural cell development, and hematopoiesis, all believed to reflect a role in cell migration. In adults, it functions pleiotropically, while mostly noted for its continued requirement in hematopoiesis. Two transcript variants encoding different isoforms have

been found for this gene. [provided by RefSeq, Jul 2008]

**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. [UniProt]

Calculated Mw 31 kDa

PTM A soluble form (sKITLG) is produced by proteolytic processing of isoform 1 in the extracellular domain.

> Found in two differentially glycosylated forms, LMW-SCF and HMW-SCF. LMW-SCF is fully Nglycosylated at Asn-145, partially N-glycosylated at Asn-90, O-glycosylated at Ser-167, Thr-168 and Thr-180, and not glycosylated at Asn-97 or Asn-118. HMW-SCF is N-glycosylated at Asn-118, Asn-90 and

Asn-145, O-glycosylated at Ser-167, Thr-168 and Thr-180, and not glycosylated at Asn-97.

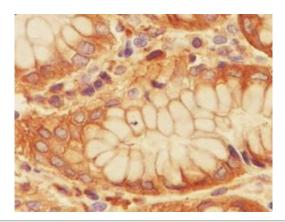
A soluble form exists as a cleavage product of the extracellular domain. [UniProt]

Cellular Localization Isoform 1: Cell membrane; Single-pass type I membrane protein. Isoform 2: Cytoplasm. Cytoplasm,

cytoskeleton. Cell membrane; Single-pass type I membrane protein. Cell projection, lamellipodium. Cell

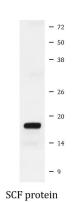
projection, filopodium. Soluble KIT ligand: Secreted. [UniProt]

### **Images**



## ARG40429 anti-SCF antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human stomach tissue stained with ARG40429 anti-SCF antibody.



# ARG40429 anti-SCF antibody WB image

Western blot: Recombinant SCF protein stained with ARG40429 anti-SCF antibody.  $\label{eq:combinator}$