

## ARG55926 anti-SCF antibody

Package: 50 µg  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes SCF
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	SCF
Species	Human
Immunogen	Synthetic peptide (18 aa) within aa. 100-150 of 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
	ICC/IF	20 µg/ml
	IHC-P	2.5 µg/ml
	WB	1 - 2 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Rat Brain Tissue Lysate	

### Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS and 0.02% Sodium azide
Preservative	0.02% Sodium azide
Concentration	1 mg/ml
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 or below. 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.

## Bioinformation

### Database links

[GeneID: 4254 Human](#)

[GeneID: 60427 Rat](#)

[Swiss-port # P21581 Rat](#)

[Swiss-port # P21583 Human](#)

### Gene Symbol

KITLG

### 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]

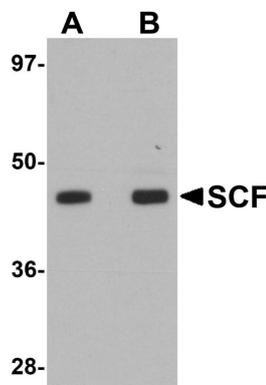
### Calculated Mw

31 kDa

### PTM

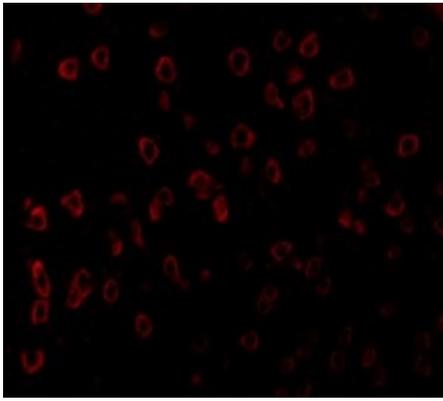
A soluble form (sKITLG) is produced by proteolytic processing of isoform 1 in the extracellular domain. Found in two differentially glycosylated forms, LMW-SCF and HMW-SCF. LMW-SCF is fully N-glycosylated at Asn-145, partially N-glycosylated at Asn-90, O-glycosylated at Ser-167, Thr-168 and Thr-180, 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.

## Images



ARG55926 anti-SCF antibody WB image

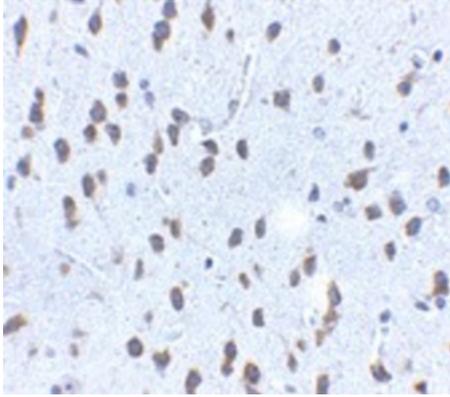
Western blot: rat brain tissue lysate stained with ARG55926 anti-SCF antibody at (A) 1 and (B) 2  $\mu$ g/ml dilution.



ARG55926 anti-SCF antibody IF image

Immunofluorescence: SCF in Human Brain tissue stained with ARG55926 anti-SCF antibody at 20 µg/ml dilution.

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ARG55926 anti-SCF antibody IHC-P image

Immunohistochemistry: SCF in mouse brain tissue stained with ARG55926 anti-SCF antibody at 2.5 µg/ml dilution.

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