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SCF (KITLG) Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1484b

Product Information

Application	WB, IF, FC, E
Primary Accession	P21583
Other Accession	Q29030, Q28132
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Pig, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB13450
Calculated MW	30899
Antigen Region	244-273

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
Target/Specificity	This SCF (KITLG) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 244-273 amino acids from the C-terminal region of human SCF (KITLG).
Dilution	WB~~1:1000 IF~~1:10~50 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	SCF (KITLG) Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

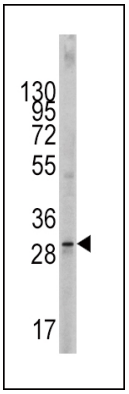
Background

KITLG is 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.

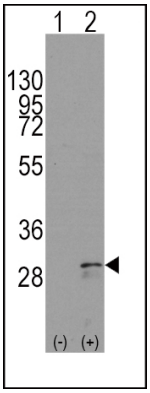
References

Young,S.M., Cell. Signal. 19 (12), 2572-2581 (2007)
Pick,M., Stem Cells 25 (9), 2206-2214 (2007)
Yasuda,A., Dig. Dis. Sci. 52 (9), 2292-2300 (2007)

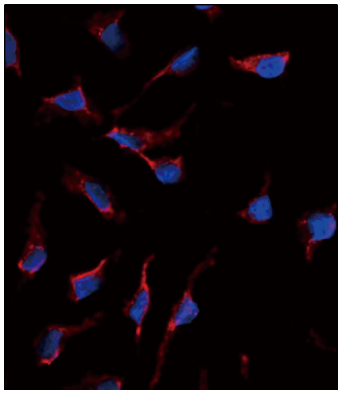
Images



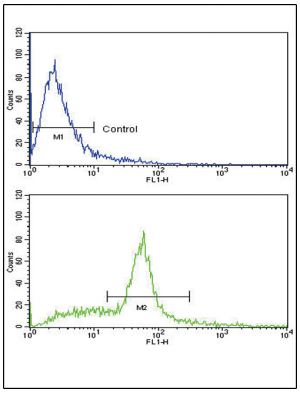
Western blot analysis of KITLG Antibody (C-term) (Cat.#AP1484b) in 293 cell line lysates (35ug/lane). KITLG (arrow) was detected using the purified Pab.



Western blot analysis of KITLG(arrow) using rabbit polyclonal KITLG Antibody (C-term) (Cat.#AP1484b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the KITLG gene (Lane 2) (Origene Technologies).



Immunofluorescence analysis of anti-KITLG Antibody (C-term) (Cat.#AP1484b) in HeLa cells. 0.025 mg/ml primary antibody was followed by Alexa-Fluor-546-conjugated donkey anti-rabbit lgG (H+L). Alexa-Fluor-546 emits orange fluorescence. Blue counterstaining is DAPI.



Flow cytometric analysis of WiDr cells using SCF (KITLG) Antibody (C-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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