

Rabbit Anti-SCF antibody

SL0545R

Product Name SCF

Chinese Name Stem cells 生长因子抗体

Alias Stem Cell Factor; C kit ligand; Ckit ligand; DKFZp686F2250; KIT ligand; Kitl; KITLG; KL 1; KL1; Mast cell growth factor; MGF; SF; SHEP7; Steel factor; Stem cell factor precursor; SCF_HUMAN.

Research Area Cell biology Stem cells Growth factors and hormones The cell membrane 蛋白

Immunogen Species Rabbit

Clonality Polyclonal

React Species Human,Mouse,Rat(predicted:Goat)

Applications WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=1ug/Test
(Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 31kDa

Cellular localization cytoplasmic The cell membrane Secretory protein

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from human SCF

Lsotype IgG

Purification affinity purified by Protein A

Buffer Solution 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

PubMed [PubMed](#)

Stem Cell Factor (SCF), also known as c-Kit ligand (KL), steel factor (SLF) and mast cell growth factor (MGF), is a 30 kDa glycoprotein with broad activities on various tissues, including hematopoietic cells, pigment cells, and primordial germ cells. SCF is secreted by endothelial cells, fibroblasts, and bone marrow stromal cells as a membrane-bound form which may be cleaved to release the soluble form. Both forms are active in promoting colony formation from murine bone marrow cells, but membrane-bound SCF is more effective in promoting hematopoieses in vivo, suggesting a role in cellular interactions between hematopoietic and stromal cells. The soluble form is thought to exist in solution as a noncovalently linked dimer. SCF is structurally related to M-CSF (CSF-1) and Flt-3/Flk-2 Ligand (FL) with all three sharing a similar size, existence of transmembrane and soluble forms, four conserved cysteines, and alternative splicing exon locations, but they share little sequence homology. SCF alone is a modest colony stimulating factor. However, in the presence of other cytokines such as EPO, TPO, GM-CSF, G-CSF, M-CSF, IL-3, and IL-7, SCF is a potent costimulant that works synergistically to increase the size of myeloid, erythroid or lymphoid lineage colonies without influencing the lineage differentiation of the progenitors.

Subunit:

Homodimer, non-covalently linked (Probable). Heterotetramer with KIT, binding two KIT molecules; thereby mediates KIT dimerization and subsequent activation by autophosphorylation.

**Product
Detail**

Subcellular Location:

Isoform 1: Cell membrane; Single-pass type I membrane protein. Isoform 2: Cell membrane; Single-pass type I membrane protein. Cytoplasm, cytoskeleton. Soluble KIT ligand: Secreted.

Similarity:

Belongs to the SCF family.

SWISS:

P21583

Gene ID:

4254

Database links:

[Entrez Gene: 4254](#) Human

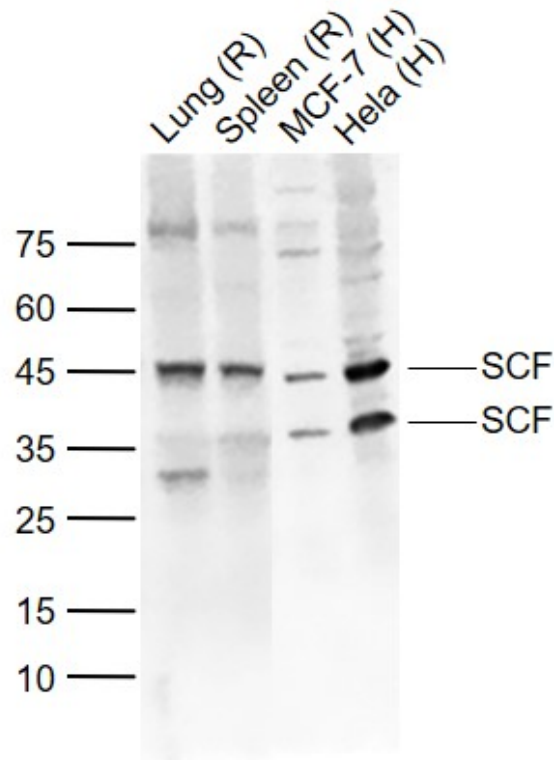
[Omim: 184745](#) Human

[SwissProt: P21583](#) Human

[Unigene: 1048](#) Human

Stem Cell Factor(SCF,又称 Kit ligand=KITLG)—Stem cells 生长因子。是 c-kit 的配体。有膜结合型和可溶型两种存在形式。具有多向性的促生长作用。

**Product
Picture**



Sample:

Lane 1: Lung (Rat) Lysate at 40 ug

Lane 2: Spleen (Rat) Lysate at 40 ug

Lane 3: MCF-7 (Human) Cell Lysate at 30 ug

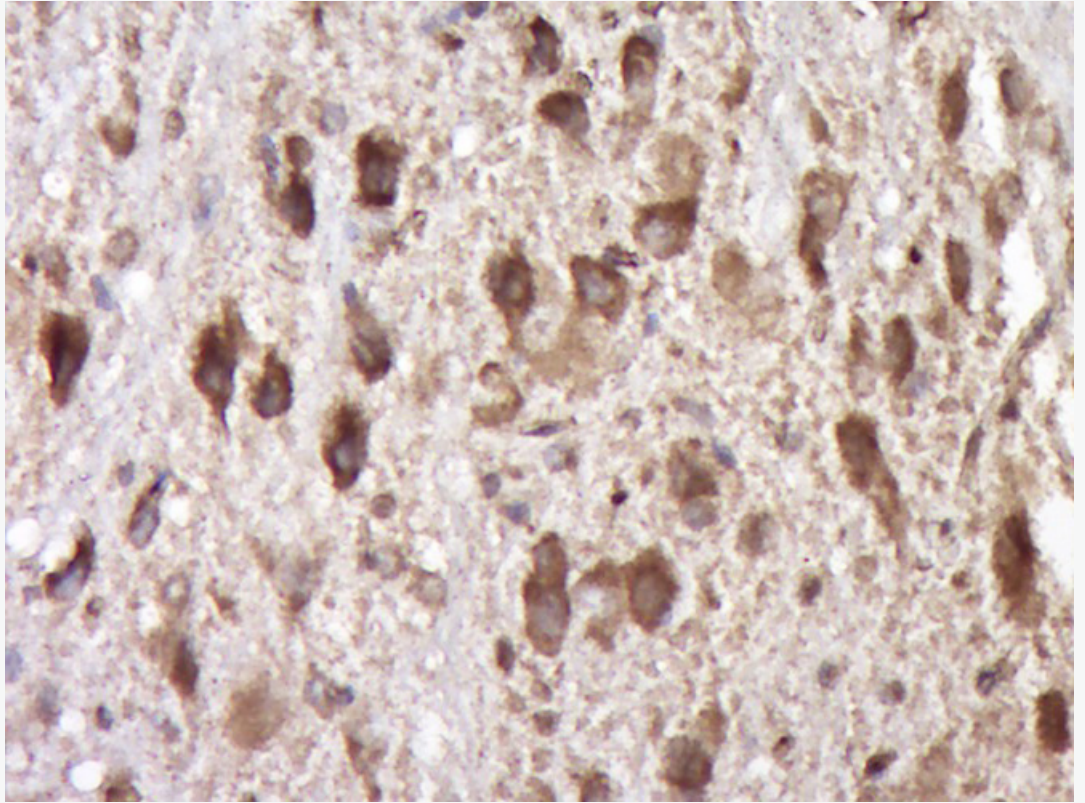
Lane 4: HeLa (Human) Cell Lysate at 30 ug

Primary: Anti-SCF (SL0545R) at 1/1000 dilution

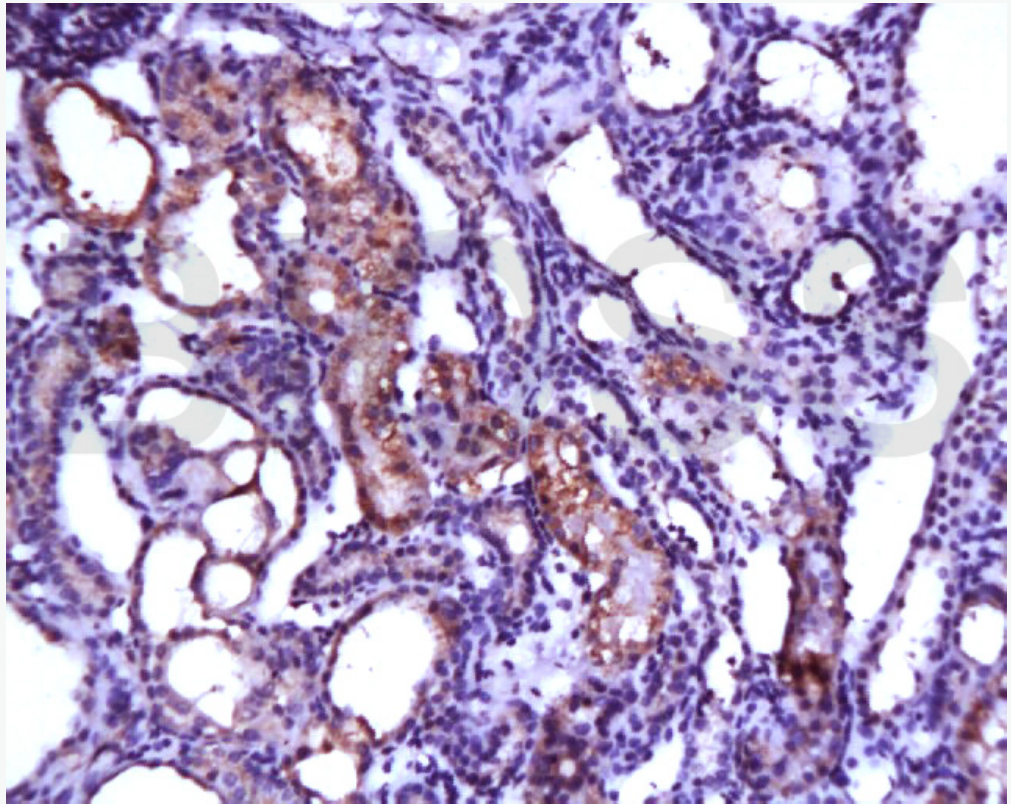
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 45/31/19 kD

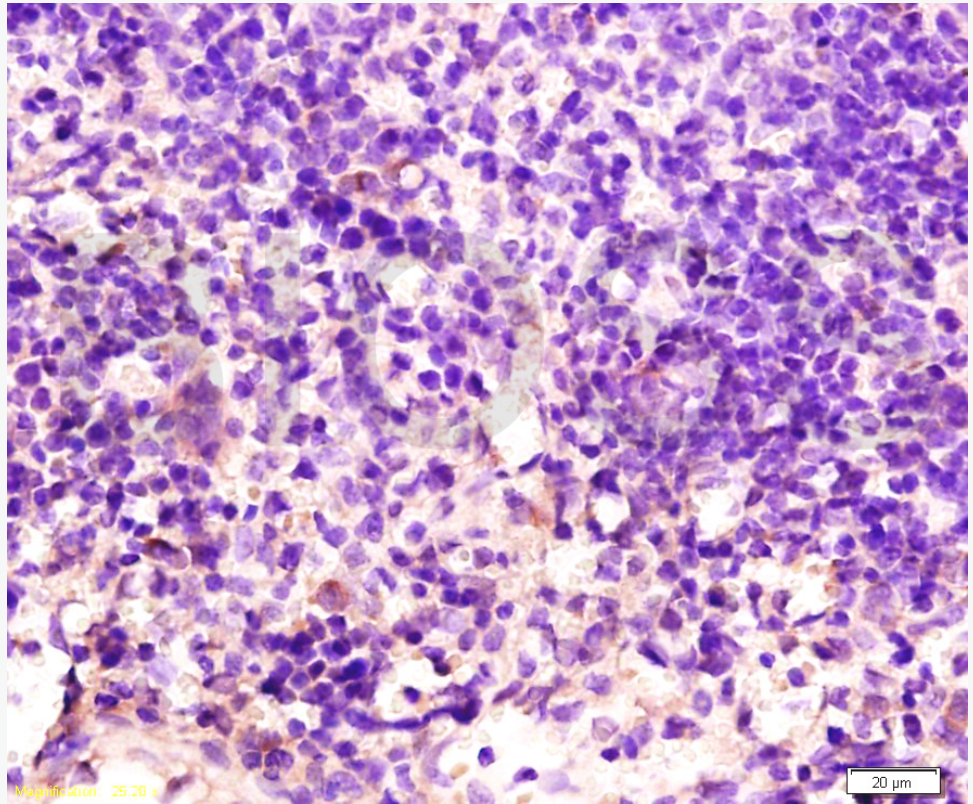
Observed band size: 45/35 kD



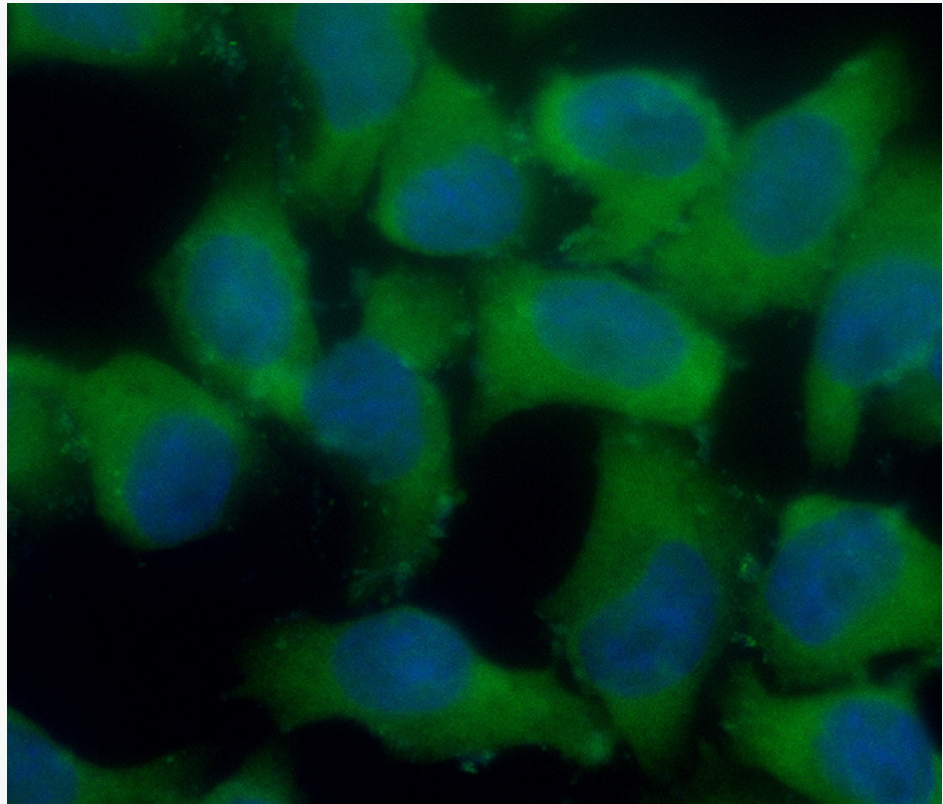
Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SCF) Polyclonal Antibody, Unconjugated (SL0545R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



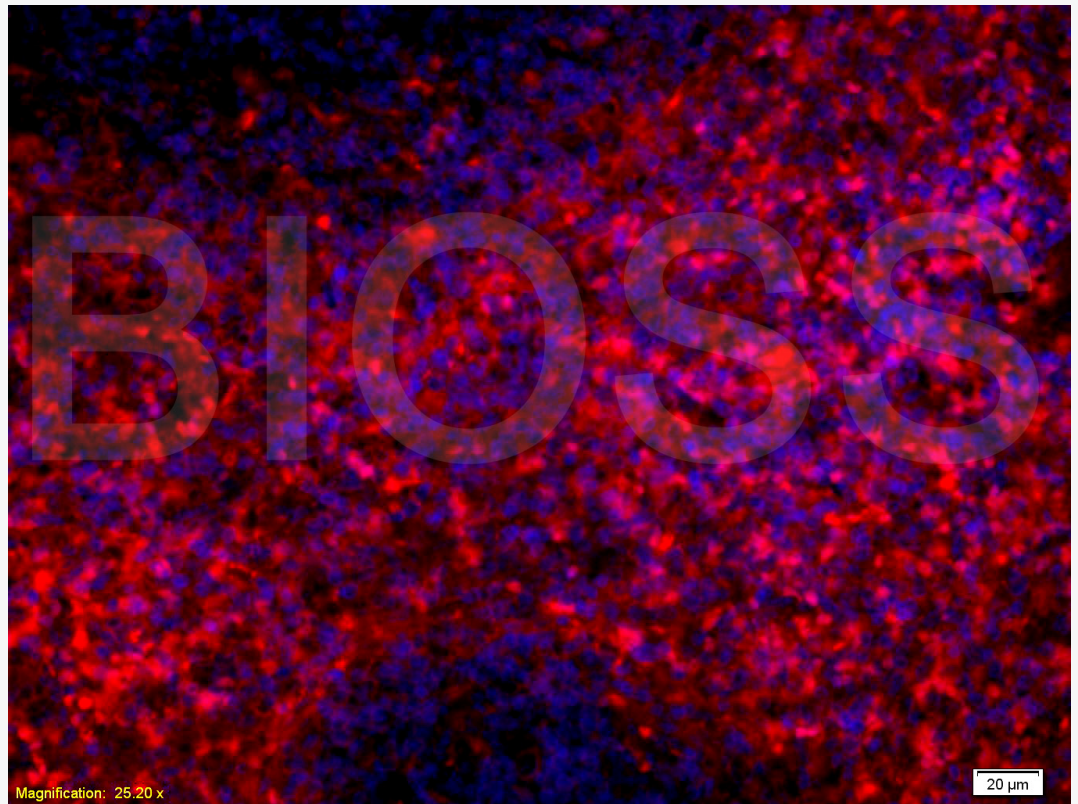
Tissue/cell: rat kidney tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Block
endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal
goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-SCF Polyclonal Antibody, Unconjugated(SL0545R) 1:200,
overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and
DAB(C-0010) staining



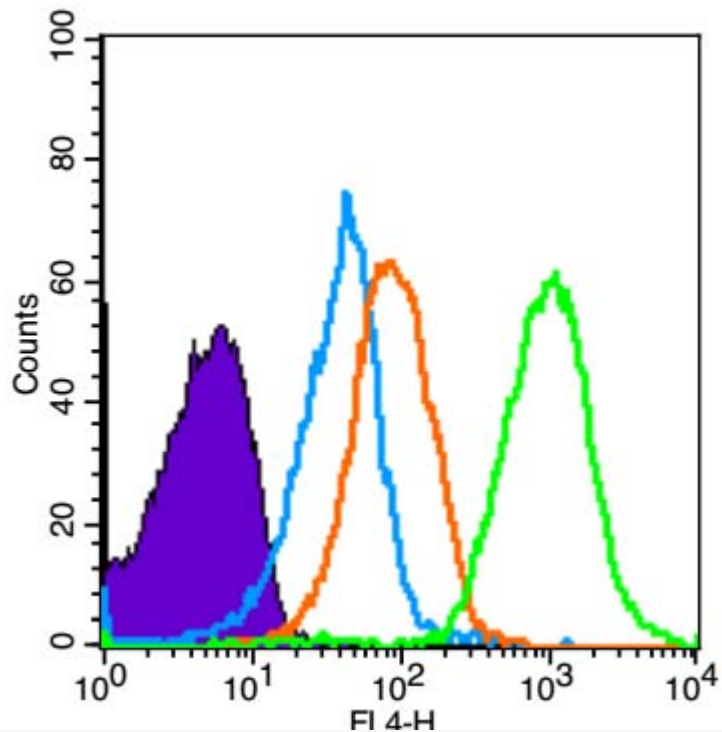
Tissue/cell: rat spleen tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Block
endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal
goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-SCF Polyclonal Antibody, Unconjugated(SL0545R) 1:200,
overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and
DAB(C-0010) staining



Hela cell; 4% Paraformaldehyde-fixed; Ice-cold methanol at -20°C for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (SCF) polyclonal Antibody, Unconjugated (SL0545R) 1:100, 90 minutes at 37°C; followed by a FITC conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.



Tissue/cell: rat spleen tissue;4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Blocking
buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-SCF Polyclonal Antibody, Unconjugated(SL0999R) 1:200,
overnight at 4°C; The secondary antibody was Goat Anti-Rabbit IgG, PE
conjugated(SL0295G-PE)used at 1:200 dilution for 40 minutes at 37°C.
DAPI(5ug/ml,blue,C-0033) was used to stain the cell nuclei



Blank control (Black line): Mouse spleen(Black).

Primary Antibody (green line): Rabbit Anti-SCF antibody (SL0545R)

Dilution: $3\mu\text{g} / 10^6$ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): Goat anti-rabbit IgG-AF647

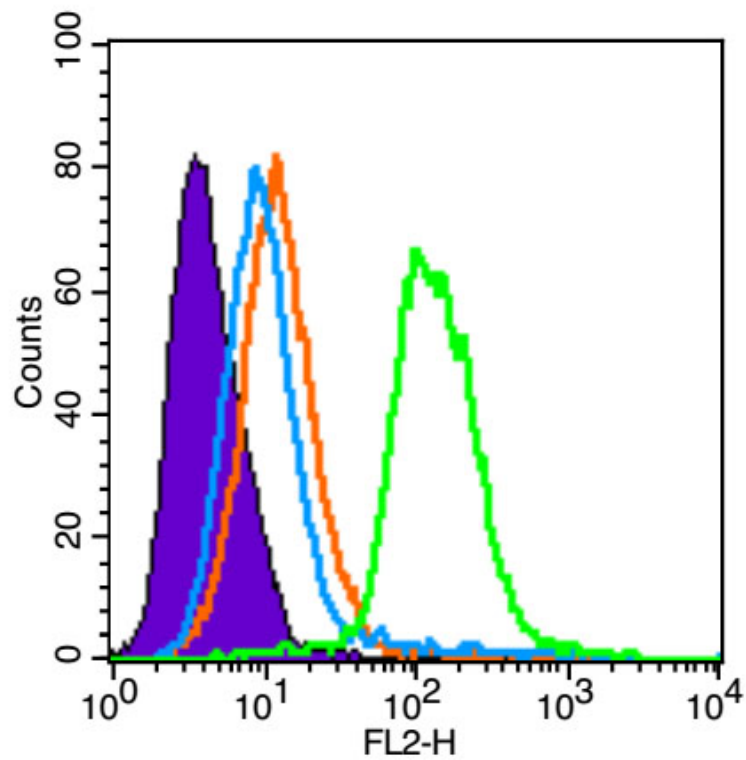
Dilution: $1\mu\text{g} / \text{test}$.

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at room temperature. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room

temperature. The secondary antibody used for 40 min at room temperature.

Acquisition of 10,000 events was performed.



Blank control (Black line): U87MG (Black).

Primary Antibody (green line): Rabbit Anti-SCF antibody (SL0545R)

Dilution: 1 μ g /10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG.

Secondary Antibody (white blue line): Goat anti-rabbit IgG-PE

Dilution: 1 μ g /test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then were incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature.The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.