

# Human CD117 SCF R/c-kit Antibody

## Antigen Affinity Purified

### Polyclonal Antibody

#### Product Information

**Product No.:** S579

**RRID:** AB\_2831788

**Storage:** -20°C to -70°C

#### Product Description

##### Specificity:

Goat Anti-Human Stem Cell Factor Receptor (SCF R) recognizes Human SCF R. This antigen affinity purified polyclonal antibody was purified using a proprietary chromatographic technique that includes covalently immobilizing the antigen proteins or peptides to agarose based beads. This purification method enhances specificity, reduces nonspecific binding of extraneous IgG and provides you with the most reliable reagent available for your early discovery research.

##### Background:

Stem cell factor receptor (SCF-R) is a transmembrane tyrosine kinase receptor of importance for the normal development of hemopoietic cells, melanoblasts, and germ cells.<sup>1</sup> SCF-R is normally expressed on haematopoietic and mast cells and also plays a regulatory role in cellular growth and differentiation.<sup>2</sup>

##### Known Reactivity Species:

Human

##### Format:

Antigen Affinity Purified

##### Immunogen:

Purified Recombinant Human SCF R (>98%)

#### Formulation

This antigen affinity purified polyclonal antibody has been 0.2 µm filtered and lyophilized from modified Dulbecco's phosphate buffered saline (1X PBS) pH 7.2 – 7.3 containing 5.0% w/v trehalose with no calcium, magnesium, or preservatives present.

#### Endotoxin

<0.1 EU/µg as determined by the LAL method

#### Storage and Stability

The lyophilized antigen affinity purified polyclonal antibody can be stored desiccated at -20°C to -70°C for twelve months from date of receipt. The reconstituted antibody can be stored for at least four weeks at 2-8°C. For long-term storage of the reconstituted antibody, aseptically aliquot into working volumes and store at -20°C to -70°C in a manual defrost freezer. Avoid Repeated Freeze Thaw Cycles. No detectable loss of activity was observed after six months.

#### Applications

##### Applications and Recommended Usage (Quality Tested By Leinco):

**Flow Cytometry:** It is recommended to use the indirect method for signal enhancement when enumerating cells expressing SCF R. A suggested method would be to stain cells expressing SCF R with 2.5 µg per  $\times 10^6$  cells in a total staining volume of  $\leq 200$  µl followed by.

**Western Blotting:** To detect Human SCF R this polyclonal antibody can be used at a concentration of 0.1-0.2 µg/ml. This polyclonal antibody should be used in conjunction with compatible second-step reagents such as PN:G505 and a chromogenic substrate such as PN:T343. The detection limit for Human SCF R is 5 ng/lane under either reducing or non-reducing conditions. The sensitivity of detection may increase up to 50 fold when a chemiluminescent substrate is used. A suitable Western blotting control is PN:S572.

**Other Applications Reported in Literature:**

**IHC (NBF/Par.):** This antibody should give satisfactory staining results when used at a concentration of 5 µg/ml. The recommended secondary antibody for IHC is PN:G505. For chromogenic detection with high signal and low background use PN:D100 or PN:K107.

**Neutralization:** This antibody is useful for neutralization of Human SCF R bioactivity. The antibody dose required to neutralize 50% (ND<sub>50</sub>) of the biological activity of Human SCF R (at 4 ng/ml) is 0.3-1 µg/ml.

**CyTOF-ready:** Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.

**Country of Origin**

USA

**References**

1. Heldin, CH. *et al.* (1994) *J Biol Chem.* 269: 21793
2. Helfand, SC. *et al.* (1996) *J Comp Pathol.* 115: 399