



#### ORDERING INFORMATION

**Catalog Number:** BAM1356

**Clone:** 180627

**Lot Number:** IKE01

**Size:** 250 µg

**Formulation:** 0.2 µm filtered solution in PBS with BSA

**Storage:** -20° C

**Reconstitution:** sterile PBS

**Specificity:** mouse SCF R

**Immunogen:** *E. coli*-derived recombinant mouse SCF R extracellular domain

**Ig class:** rat IgG<sub>2A</sub>

**Applications:** Flow Cytometry  
Immunohistochemistry  
Western blot

## ***Biotinylated*** ***Anti-mouse SCF R/c-kit (CD117) Antibody***

### ***Preparation***

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a rat immunized with purified, *E. coli*-derived, recombinant mouse Stem Cell Factor Receptor (rmSCF R) extracellular domain. The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography and then biotinylated. SCF R is also known as the c-kit proto-oncogene protein and as CD117. Together with its ligand, stem cell factor (also called c-kit ligand or mast cell growth factor), SCF R plays an essential role in gametogenesis, melanogenesis and hematopoiesis. SCF R is expressed in hematopoietic progenitor cells, normal B- and T-lymphocyte progenitors, mast cells, germ cells, melanocytes, neurons, glial cells, placenta, kidney, lung and gut. In addition, SCF R expression has also been reported in several human tumor cell lines.<sup>1,2</sup>

### ***Formulation***

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) containing 50 µg of bovine serum albumin (BSA) per 1 µg of antibody.

### ***Reconstitution***

Reconstitute with sterile PBS. If 1 mL of PBS is used, the antibody concentration will be 250 µg/mL.

### ***Storage***

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

### ***Specificity***

This antibody was selected for its ability to recognize mouse SCF R in direct ELISAs. It also recognizes SCF R on bone marrow cells by flow cytometry.

### ***Applications***

**Flow Cytometry** - Dilute this antibody to 25 µg/mL and add 10 µL of the diluted solution to 1 - 2.5 x 10<sup>5</sup> cells in a total reaction volume not exceeding 200 µL. The binding of unlabeled monoclonal antibodies may be visualized by adding 10 µL of a 25 µg/mL stock solution of a secondary developing reagent such as streptavidin conjugated to a fluorochrome.

**Immunohistochemistry** - This antibody can be used with the appropriate secondary reagents at 10 - 25 µg/mL in 4% paraformaldehyde-fixed cells.

**Western Blot** - This antibody can be used at 1 - 2 µg/mL with the appropriate secondary reagents to detect mouse SCF R. The detection limit for rmSCF R is approximately 25 ng/lane under non-reducing conditions.

**Optimal dilutions should be determined by each laboratory for each application.**

### **References**

1. Broudy, V., 1997, Blood **90**:1345.
2. Vliagoftis, H. *et al.*, 1997, J. Allergy Clin. Immunol. **100**:435.

