

## **Product datasheet for CL042FX**

# Kit Rat Monoclonal Antibody [Clone ID: ACK4]

### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: ACK4
Applications: FC

Recommended Dilution: Flow Cytometry.

Reactivity:MouseHost:RatIsotype:IgG2a

Clonality: Monoclonal

**Immunogen:** IL-3 dependent mast cells derived from WB- +/+ mice.

Donor: Wistar spleen.

Fusion Partner: X63.653. Ag8.

**Specificity:** Recognizes the receptor tyrosine kinase, c-kit (CD117). c-kit positive cells are a subset of

CD34+ hematopoietic precursor cells and it is expressed on 5-10% of total adult bone

marrow cells.

Formulation: PBS containing 0.02% Sodium Azide as preservative and EIA grade BSA as a stabilizing protein

to bring total protein concentration to 4-5 mg/ml.

Label: FITC

State: Liquid purified Ig fraction.

Label: Fluorescein Isothiocyanate Isomer 1 Absorption emission: 495 nm / 528 nm

**Concentration:** lot specific

**Purification:** Protein G Chromatography.

Conjugation: FITC

**Storage:** Store the antibody undiluted at 2-8°C for one month.

For long term storage, aliquot and freeze unused portion at -20  $^{\circ}\text{C}$  in volumes appropriate for

single usage.

This product is photosensitive and should be protected from light

Avoid freeze/thaw cycles.

**Stability:** Shelf life: One year from despatch.



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## Kit Rat Monoclonal Antibody [Clone ID: ACK4] - CL042FX

**Gene Name:** kit oncogene

Database Link: Entrez Gene 16590 Mouse

P05532

**Background:** CD117 or c-kit is a receptor tyrosine kinase. The ligand for this receptor is steel factor (stem

cell factor), which exists in both soluble and membrane form. The interaction between steel factor and c-kit is essential for the development of hematopoietic, gonadal and pigment stem

cells.

Synonyms: SCFR, KIT

Note: Protocol: FLOW CYTOMETRY ANALYSIS:

#### Method:

- 1. Prepare a cell suspension in media A. For cell preparations, deplete the red blood cell population with cell separation medium.
- 2. Wash 2 times.
- 3. Resuspend the cells to a concentration of 2x10e7 cells/ml in media A. Add  $50~\mu$ l of this suspension to each tube (each tube will then contain 1~x~10e6 cells, representing 1~test).
- 4. To each tube, add 1  $\mu$ g\* of CL042F per 10e6 cells.
- 5. Vortex the tubes to ensure thorough mixing of antibody and cells.
- 6. Incubate the tubes for 30 minutes at 4°C.

(It is recommended that the tubes are protected from light, since most fluorochromes are light sensitive.)

- 7. Wash 2 times at 4°C.
- 8. Resuspend the cell pellet in 50 µl ice cold media B.
- 9. Transfer to suitable tubes for flow cytometric analysis containing 15  $\mu$ l of propidium iodide at 0.5 mg/ml in PBS. This stains dead cells by intercalating in DNA.

#### Media:

A. Phosphate buffered saline (pH 7.2) + 5% normal serum of host species + sodium azide (100  $\mu$ l of 2M sodium azide in 100 mls).

B. Phosphate buffered saline (pH 7.2) + 0.5% Bovine serum albumin + sodium azide (100  $\mu$ l of 2M sodium azide in 100 mls).