

Product datasheet for **CL042F**

Kit Rat Monoclonal Antibody [Clone ID: ACK4]

Product data:

Product Type:	Primary Antibodies
Clone Name:	ACK4
Applications:	FC
Recommended Dilution:	Flow Cytometry.
Reactivity:	Mouse
Host:	Rat
Isotype:	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°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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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: 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 2×10^7 cells/ml in media A. Add 50 μ l of this suspension to each tube (each tube will then contain 1×10^6 cells, representing 1 test).
 4. To each tube, add 1 μ g* of CL042F per 10^6 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 μ l ice cold media B.
 9. Transfer to suitable tubes for flow cytometric analysis containing 15 μ 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 μ l of 2M sodium azide in 100 mls).
- B. Phosphate buffered saline (pH 7.2) + 0.5% Bovine serum albumin + sodium azide (100 μ l of 2M sodium azide in 100 mls).

Results:Tissue Distribution by Flow Cytometry Analysis:

Mouse Strain: BALB/c

Cell Concentration : 1×10^6 cells per test

Antibody Concentration Used: 0.2 μ g/ 10^6 cells

Isotypic Control: FITC Rat IgG2a

Strain Distribution by Flow Cytometry Analysis:

Cell Concentration : 1×10^6 cells per test

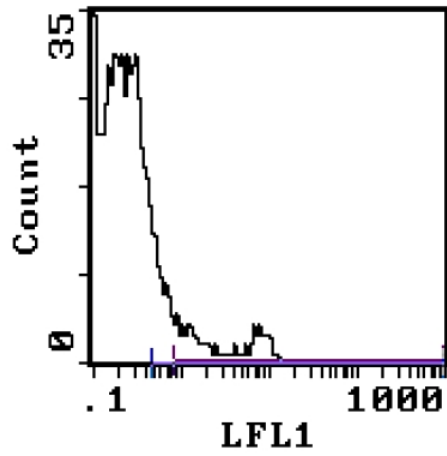
Antibody Concentration Used: 0.2 μ g / 10^6 cells

Strains Tested: AKR, BALB/c, C3H/He, C57BL/6

Positive: AKR, BALB/c, C3H/He, C57BL/6

Negative: none

Product images:



Cell Source: Bone Marrow Percentage of cells stained above control: 7.0%