OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for CL042BX

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:	Anti-mouse CD117 monoclonal antibody recognizes the receptor tyrosine kinase, c-kit. 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. 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 (NaN3) as preservative and EIA grade BSA as a stabilizing protein to bring total protein concentration to 4-5 mg/ml. Label: Biotin State: Liquid purified Ig fraction
Concentration:	lot specific
Purification:	Affinity chromatography on Protein G
Conjugation:	Biotin
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	kit oncogene

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Database Link: Entrez Gene 16590 Mouse
P05532

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 Lympholyte®-M (cell separation medium).
2. Wash 2 times.
3. Resuspend the cells to a concentration of 2x10e7 cells/ml in media A. Add 50 µl of this suspension to each tube (each tube will then contain 1 x 10e6 cells, representing 1 test).
4. To each tube, add 0.2-0.1 mg of this antibody 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.
7. Wash 2 times at 4°C.
8. Add 100 µl of secondary antibody (Streptavidin-PE) at a 1/250 dilution.
9. Incubate tubes at 4°C for 30 - 60 minutes (It is recommended that tubes are protected from light since most fluorochromes are light sensitive).
10. Wash 2 times at 4°C.
11. Resuspend the cell pellet in 50 µl ice cold media B.
12. Transfer to suitable tubes for flow cytometric analysis containing 15 µl 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 µl of 2M sodium azide in 100 mls).
B. Phosphate buffered saline (pH 7.2) + 0.5% Bovine serum albumin + sodium azide (100 µl of 2M sodium azide in 100 mls).

Results:

Tissue Distribution by Flow Cytometry Analysis:
Mouse Strain: C3H/He
Cell Concentration: 1x10e6 cells per test
Antibody Concentration Used: 0.2 µg/10e6 cells
Isotypic Control: Biotin Rat IgG2a
Strain Distribution by Flow Cytometry Analysis:
Cell Concentration: 1x10e6 cells per test
Antibody Concentration Used: 0.2 mg /10e6 cells
Strains Tested: AKR, BALB/c, C3H/He,
Positive: AKR, BALB/c, C3H/He,
Negative: none

Product images: