

Product datasheet for AM05206FC-N

OriGene Technologies, Inc.

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c Kit (KIT) Mouse Monoclonal Antibody [Clone ID: NU-c-kit]

Product data:

Product Type: Primary Antibodies

Clone Name: NU-c-kit

Applications: FC

Recommended Dilution: Flow Cytometry: Use 10 μl per 1 x 106 PBMC in 100 μl PBS or 10 μl per 100 μl whole blood.

Monitoring of CD34-positive cells. Analysis of 8% of myelomonocytes.

Study of hematopoietic stem cell differentiation and proliferation.

Study of the c-kit gene product (SCF receptor). Study of a part of acute myeloblastic leukemia cells.

Study of chronic myeloblastic leukemia cells.

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Immunized with transfected cells with c-kit DNA in human leukemia cells (UT-7).

Specificity: This CD117 antibody reacts against c-kit gene product (SCF receptor).

CD117 reacts with 8% of myelomonocytes and 75% of CD34-positive cells. The hematopoietic stem cells are included in this fraction and therefore, this gene product is considered to have an important function for differentiation and proliferation of hematopoietic cells. CD117 also

reacts with placenta, brain, a part of acute myeloblastic leukemia cells and chronic

myeloblastic leukemia cells, but not with acute lymphoblastic leukemia cells.

Formulation: PBS containing 0.2% carriers protein and 0.08% Sodium Azide as preservative.

Label: FITC

State: Liquid (sterile filtered) IgG fraction.

Concentration: lot specific

Conjugation: FITC

Storage: Store the antibody undiluted at 2-8°C.

DO NOT FREEZE!

Stability: Shelf life: One year from despatch.





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Gene Name: KIT proto-oncogene receptor tyrosine kinase

Database Link: Entrez Gene 3815 Human

P10721

Background: c-Kit is a transmembrane tyrosine kinase encoded by the cKit proto oncogene. c-Kit acts to

regulate a variety of biological responses including cell proliferation, apoptosis, chemotaxis and adhesion. Ligand binding to the extracellular domain leads to autophosphorylation on several tyrosine residues within the cytoplasmic domain, and activation. Mutations in c-Kit have been found to be important for tumor growth and progression in a variety of cancers including mast cell diseases, gastrointestinal stromal tumor, acute myeloid leukemia, Ewing sarcoma and lung cancer. Phosphorylation at tyrosine 721 of c-Kit allows binding and

activation of PI3 kinase.

Synonyms: SCFR, KIT

Note: Protocol: PBMC:

Count the number of positive cells in peripheral blood.

Add 10 μ l of Mab to 50 μ l suspended lymphocyte solution at 2 x 10e7.

Mix gently and incubate for 15 minutes at 2-8°C.

Wash twice with PBS and analyze or fix with 0.5% v/v of paraformaldehyde in PBS and

analyze.

See instrument manufacturers instructions for Lysed Whole Blood and Immunofluorescence

analysis with a flow cytometer or microscope.