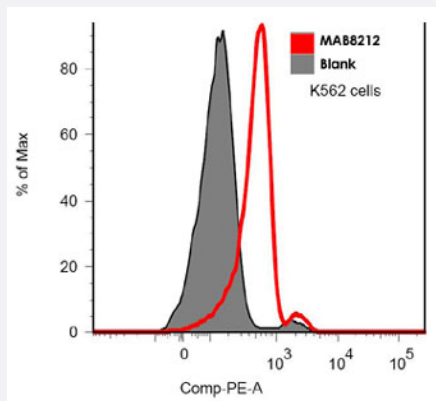


# FLT3 monoclonal antibody, clone BV10A4

Catalog # MAB8212      Size 100 ug

## Applications



### Flow Cytometry

Flow cytometric analysis of FLT3 in K-562 cells with 5 ug/mL of FLT3 monoclonal antibody, clone BV10A4 (Cat # MAB8212).

## Specification

|                             |                                                                                                                                   |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Description</b>  | Mouse monoclonal antibody raised against native FLT3.                                                                             |
| <b>Immunogen</b>            | Native purified FLT3 from BV-173 leukemic cell line.                                                                              |
| <b>Host</b>                 | Mouse                                                                                                                             |
| <b>Theoretical MW (kDa)</b> | 130-160                                                                                                                           |
| <b>Reactivity</b>           | Human                                                                                                                             |
| <b>Specificity</b>          | This antibody reacts with FLT3, a 130-160 KDa type III receptor tyrosine kinase that is involved in early steps of hematopoiesis. |
| <b>Form</b>                 | Liquid                                                                                                                            |
| <b>Concentration</b>        | 1 mg/mL                                                                                                                           |
| <b>Isotype</b>              | IgG1                                                                                                                              |
| <b>Recommend Usage</b>      | Flow Cytometry (10 ug/mL per 10 <sup>6</sup> cells/mL)<br>The optimal working dilution should be determined by the end user.      |

|                            |                                                                                                                        |
|----------------------------|------------------------------------------------------------------------------------------------------------------------|
| <b>Storage Buffer</b>      | In PBS, pH 7.4 (0.09% sodium azide)                                                                                    |
| <b>Storage Instruction</b> | Store at 4°C. Do not freeze.<br>Aliquot to avoid repeated freezing and thawing.                                        |
| <b>Note</b>                | This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only. |

## Applications

- Immunohistochemistry (Frozen sections)
- Immunoprecipitation
- Flow Cytometry

Flow cytometric analysis of FLT3 in K-562 cells with 5 ug/mL of FLT3 monoclonal antibody, clone BV10A4 (Cat # MAB8212).

## Gene Info — FLT3

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Entrez GeneID</b>      | <a href="#">2322</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Gene Name</b>          | FLT3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Gene Alias</b>         | CD135, FLK2, STK1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Gene Description</b>   | fms-related tyrosine kinase 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Omim ID</b>            | <a href="#">136351</a> <a href="#">601626</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Gene Ontology</b>      | <a href="#">Hyperlink</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Gene Summary</b>       | This gene encodes a class III receptor tyrosine kinase that regulates hematopoiesis. The receptor consists of an extracellular domain composed of five immunoglobulin-like domains, one transmembrane region, and a cytoplasmic kinase domain split into two parts by a kinase-insert domain. The receptor is activated by binding of the fms-related tyrosine kinase 3 ligand to the extracellular domain, which induces homodimer formation in the plasma membrane leading to autophosphorylation of the receptor. The activated receptor kinase subsequently phosphorylates and activates multiple cytoplasmic effector molecules in pathways involved in apoptosis, proliferation, and differentiation of hematopoietic cells in bone marrow. Mutations that result in the constitutive activation of this receptor result in acute myeloid leukemia and acute lymphoblastic leukemia. [provided by RefSeq] |
| <b>Other Designations</b> | CD135 antigen FL cytokine receptor FLT3 receptor tyrosine kinase OTTHUMP00000042340 fetal liver kinase 2 growth factor receptor tyrosine kinase type III stem cell tyrosine kinase 1 tyrosine-protein kinase receptor FLT3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

## Publication Reference

- [Detailed analysis of FLT3 expression levels in acute myeloid leukemia.](#)

Kuchenbauer F, Kern W, Schoch C, Kohlmann A, Hiddemann W, Haferlach T, Schnittger S.

Haematologica 2005 Dec; 90(12):1617.

- [Inhibition of FLT3 signaling targets DCs to ameliorate autoimmune disease.](#)

Whartenby KA, Calabresi PA, McCadden E, Nguyen B, Kardian D, Wang T, Mosse C, Pardoll DM, Small D.

PNAS 2005 Nov; 102(46):16741.

Application: WB-Ce, Mouse, Bone marrow dendritic cells

- [Increased recruitment of hematopoietic progenitor cells underlies the ex vivo expansion potential of FLT3 ligand.](#)

Haylock DN, Horsfall MJ, Dowse TL, Ramshaw HS, Niutta S, Protosaltis S, Peng L, Burrell C, Rappold I, Buhring HJ, Simmons PJ.

Blood 1997 Sep; 90(6):2260.

Application: Flow Cyt, Human, Human bone marrow cells

## Pathway

- [Acute myeloid leukemia](#)
- [Cytokine-cytokine receptor interaction](#)
- [Hematopoietic cell lineage](#)
- [Pathways in cancer](#)

## Disease

- [Acute Disease](#)
- [Cardiovascular Diseases](#)
- [Cell Transformation](#)
- [Chromosome Aberrations](#)
- [Diabetes Mellitus](#)

- [Disease Progression](#)
- [Down Syndrome](#)
- [Edema](#)
- [Fractures](#)
- [Genetic Predisposition to Disease](#)
- [Leukemia](#)
- [Leukocytosis](#)
- [Lymphoproliferative Disorders](#)
- [Myelodysplastic Syndromes](#)
- [Neoplasm](#)
- [Neovascularization](#)
- [Noonan Syndrome](#)
- [Osteoporosis](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Recurrence](#)
- [Tobacco Use Disorder](#)
- [Translocation](#)