ANTI-HUMAN CD34

Conjugated Mouse Monoclonal Antibodies Against Human CD34
Clone 8G12

FITC Conjugate:	**Catalog # 10413**	**100 tests**
PE Conjugate:	**Catalog # 10513**	**100 tests**
APC Conjugate:	**Catalog # 10613**	**100 tests**

SPECIFICITY:

CD34 is expressed on hematopoietic stem cells and on progenitor cells of all blood cell lineages. CD34 is also expressed on bone marrow stromal cells and on endothelial cells. CD34 is expressed on ~1-4% of nucleated BM cells and ~0.1-1% of umbilical cord blood cells. $CD34^+$ cells are present in normal peripheral blood at very low frequencies (<0.1%), but they can be mobilized from the BM into the blood stream by exposure to cytoreductive therapy or administration of cytokines.

CD34 is a highly N- and O-glycosilated type I transmembrane glycoprotein. Monoclonal antibodies against CD34 can be separated into three classes based on their reactivity against carbohydrate or protein epitopes. Class I anti-CD34 monoclonal antibodies recognize epitopes that contain sialic acid residues. Class II antibodies also recognize carbohydrate epitopes, but class II epitopes are not destroyed by desialylation; class III antibodies recognize epitopes on the CD34 polypeptide. Clone 8G12 and 563 are both specific for class III epitopes.
Clone 8G12 does not recognize rhesus macaque CD34 cells.

CLONE: 8G12

ISOTYPE: $IgG_1\kappa$ (mouse)

FORMAT:

FITC-conjugate: 50 µg in 2 mL (25 µg/mL) in phosphate buffered saline (PBS) containing gelatin and 0.1% (w/v) sodium azide.
PE-conjugate: 50 µg in 2 mL (25 µg/mL) in PBS containing gelatin and 0.1% (w/v) sodium azide.
APC-conjugate: 50 µg in 0.5 mL (100 µg/mL) in PBS containing gelatin and 0.1% (w/v) sodium azide.

STABILITY AND STORAGE:

Store at 4ºC. Do not freeze. Product is stable for at least 6 months.

APPLICATIONS AND DIRECTIONS FOR USE:

Flow cytometry:
Recommended amount per $1x10^6$ cells in a volume of 100 µL:

- FITC-conjugate (Cat No. 10413): 20 µL
- PE-conjugate (Cat No. 10513): 20 µL
- APC-conjugate (Cat No. 10613): 5 µL

Appropriate conditions should be established for each application.

Cell separation:
Positive selection of $CD34^+$ cells with StemCell's reagents for immunomagnetic cell separation. Please contact us for more information.

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NOT FOR CLINICAL USE; INCLUDING IN VITRO DIAGNOSTIC USE, AND EX VIVO OR IN VIVO THERAPEUTIC USE IN CLINICAL TRIALS OR IN CLINICAL PRACTISE. THIS REAGENT IS FOR RESEARCH ONLY.

Hazardous Ingredient: Sodium Azide. *Avoid exposure to skin and eyes, ingestion and contact with heat, acids and metals. Wash exposed skin with soap and water. Flush eyes with water. Dilute with running water before discharging into plumbing.*

REFERENCES:

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