



Mouse anti-Human Myeloperoxidase, FITC Conjugated mAb

E16HFMPO

<u>Catalog No.</u>	<u>Size</u>
E16HFMPO-100	100 Tests
E16HFMPO -050	50 Tests

Description:

The monoclonal antibody 4AMPO455-8E6 recognizes myeloperoxidase (MPO), a protein within the azurophilic granules of myeloid cells. MPO is a multimeric protein comprised of two 55 kDa subunits and two 15 kDa subunits. The larger subunits associate with a heme protein resulting in a greenish color. As an enzyme, MPO breaks down hydrogen peroxide and oxidizes tyrosine. The products of this reaction, hypochlorous acid and tyrosyl radical, cause the cytotoxic and killing effects characteristic of neutrophils. Myeloperoxidase is important in the diagnosis of some cancers and increases in serum levels have been shown to correlate with cardiac events.

Storage Condition:	Store at 4°C. DO NOT FREEZE. LIGHT SENSITIVE MATERIAL.
Clone:	4AMPO455-8E6
Isotype:	Mouse IgG1
Reactivity:	Human, Not yet tested in other species.
Vol.per.Test:	10 µl/Test
Storage Buffer:	Phosphate-buffered solution, pH 7.4, containing 0.09% sodium azide and 0.2% (w/v) BSA
Applications:	FCM IF

Experimental Methods:

1. Take 100µl peripheral blood anticoagulated by EDTA and add to the bottom of 5ml tube;
2. Add 2 ml 1×RBC lysis buffer, incubate for 10 minutes after mixing, dissolve red blood cells (recommended: RBC lysing Solution 10×, Cat.: E16XP001);
3. Sample tube is set to 1000 rpm centrifugation for 5 minutes, discard the supernatant;
4. Add 2 ml PBS wash buffer to resuspend the cells, then 1000 rpm centrifugation for 5 minutes, discard the supernatant;
5. Add 1 ml fix buffer (1X), 40 minutes;
6. Add 1 ml fix&Perm buffer to resuspend the cells, then 1000 rpm centrifugation for 5 minutes, discard the supernatant;
7. Add 1 ml fix&Perm buffer to resuspend the cells, 30min;
8. Add 1 ml fix&Perm buffer to resuspend the cells, then 1000 rpm centrifugation for 5 minutes, discard the supernatant;
9. Add appropriate amount of antibody to the bottom of flow tube, incubate for 30 minutes at room temperature;
10. Add 1 ml fix&Perm buffer to resuspend the cells, then 1000 rpm centrifugation for 5 minutes, discard

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the supernatant;

11. Repeat step 8.
12. Add 0.5 ml PBS wash buffer to resuspend the cells and detect by flow cytometry (sample should be determined on the day on the machine and can also be added fixation overnight at 4 °C then measured).

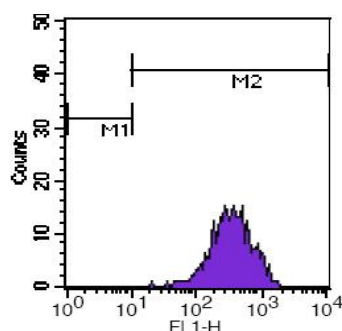
[PBS wash buffer: PBS +1% FBS +0.1% NaN₃; Cat.: E16XP005]

[Cell fixation: 2% formaldehyde solution]

Notices:

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. **Caution:** Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing;
3. If the sample can not be timely analysis, please fixed;
4. **For research use only, not for diagnostic or therapeutic use.**

Profile of peripheral blood lymphocytes intracellular analyzed by flow cytometry



Human peripheral blood lymphocytes analyzed with Myeloperoxidase (MPO) FITC mAb

References

1. Knapp W, Strobl H, Majdic O. Flow cytometric analysis of cell-surface and intracellular antigens in leukemia diagnosis. Cytometry. 1994 Dec 15;18(4):187-98.
2. Koeffler HP, Ranyard J, Pertcheck M. Myeloperoxidase: its structure and expression during myeloid differentiation. Blood. 1985 Feb;65(2):484-91.

Related products:

Catalog No.	Product name				Applications	
E16HFMPO	Mouse	Anti-Human	Myeloperoxidase	FITC Conjugated	FCM	IF
E16HPMPO	Mouse	Anti-Human	Myeloperoxidase	PE Conjugated mAb	FCM	IF

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