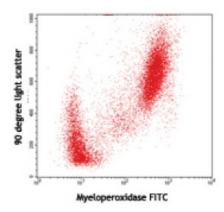
## **Product Data Sheet**

#### FITC anti-human MPO Flow Kit

Catalog # / Size: 2336005 / 50 tests

> Clone: MPO421-8B2 Isotype: Mouse IgG1, κ

**Reactivity:** Human Concentration: Lot-specific



Human peripheral blood intracellularly stained using the myeloperoxidase antibody (top) or isotype control (bottom) included in the BioLegend MPO FITC Flow Kit.

### **Applications:**

**Applications:** Flow Cytometry

Recommended **Usage:** 

Each lot of this antibody is quality control tested by intracellular

immunofluorescent staining with flow

cytometric analysis. Test size

products are transitioning from 20 microL to 5 microL per test. Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.



#### **MPO Staining Procedure:**

1. Prepare cells of interest, perform cell surface antigen staining as described in

BioLegend's Cell Surface

Immunofluorescence Staining Protocol, then fix cells in 1.0 ml/tube Fixation Buffer (Part No.78078) in the dark for 20 minutes at room temperature.

2. Centrifuge at 350 x g for 5 minutes,

discard supernatant.

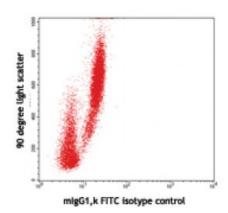
3. Dilute 10X Intracellular Staining Perm Wash Buffer (Cat. No. 421002) to 1X in

DI water.

4. Resuspend fixed cells in 1.0 ml/tube Intracellular Staining Perm Wash Buffer and centrifuge at 350 x g for 5-10 minutes.

5. Repeat step 4 twice.

6. Resuspend fixed/permeabilized cells



in the approximate 50-100 microL residual Intracellular Staining Perm Wash Buffer and add 20 microL FITC-conjugated MPO antibody (Part No.78079) or mouse IgG1,k isotype control (Part No.78080). Incubate for 30 minutes in the dark at room temperature.

7. Wash 2x with 1.0 ml of Intracellular

7. Wash 2x with 1.0 ml of Intracellular Staining Perm Wash Buffer and centrifuge at 350 x g for 5 minutes.
8. Resuspend the cells in 0.5 ml Cell Staining Buffer and interrogate by flow cytometry using proper machine settings.

#### **Kit Contents:**

Anti-human MPO FITC, Part No. 78079, 50 tests
 Mouse IgG1 isotype control FITC, Part No. 78080, 50 tests
 Fixation Buffer, Part No. 78078, 50 ml (25 ml x 2 bottles)
 Intracellular Staining Perm Wash Buffer, Cat. No. 421002, 100 ml

#### **Description:**

Myeloperoxidase (MPO) is a heterotetrameric protein consisting of two 60 kD heavy units and two 12 kD light units. A lysosomal enzyme, MPO is able to catalyze the production of hypochlorous acid, a potent microbicidal agent, from hydrogen peroxide and chloride anion during the neutrophil respiratory burst. MPO is a major enzyme involved in the inflammatory responses of polymorphonuclear leucocytes. MPO is localized to the azurophilic granules of mature granulocytes and monocytes and is also expressed in some acute myeloid leukemia cells.

# Antigen References:

- Goedken M, et al. 2007. J. Biol. Chem. 282:27994
   Nauseef WM, et al. 1988. Euro. J. Haemat. 40:97
- 3. Kelebanoff SJ, et al. 1999. Proc. Assoc. Am. Phys. 111:383