

## FITC anti-human MPO Antibody

<b>Catalog# / Size</b>	347205 / 25 tests
<b>Clone</b>	MPO421-8B2
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Myeloperoxidase
<b>Isotype</b>	Mouse IgG1, $\kappa$
<b>Description</b>	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.

### Product Details

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<b>Verified Reactivity</b>	Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with FITC under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our <a href="#">Certificate of Analysis</a> online tool.)
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">ICFC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">intracellular immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is 5 $\mu$ L per million cells in 100 $\mu$ L staining volume or 5 $\mu$ L per 100 $\mu$ L of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Excitation Laser</b>	Blue Laser (488 nm)
<b>Additional Product Notes</b>	<b>MPO Staining Procedure</b>

1. Prepare cells of interest and perform cell surface antigen staining as described in BioLegend's Cell Surface Immunofluorescence Staining Protocol or Cell Surface Immunofluorescence Staining Protocol for Whole Blood.
2. Add 50  $\mu$ L of cell suspension to each tube.
3. Add 100  $\mu$ L of FluoroFix™ Buffer (Cat. No. 422101) to each tube and vortex immediately for at least 3 seconds. Assure no sample remains on the side of each tube.
4. Incubate at room temperature in the dark for 15 minutes.
5. During fixation, prepare antibody dilutions (if needed) in 1X Intracellular Staining Permeabilization Wash Buffer (Cat. No. 421002) (typically in final volume of 50  $\mu$ L)
6. Vortex fixed samples briefly, then add 600  $\mu$ L of 1X Intracellular Staining Permeabilization Wash Buffer to each tube and vortex immediately for at least 3 seconds.
7. Add appropriate amount of antibody diluted in 1X Intracellular Staining Permeabilization Wash Buffer, vortex briefly, and incubate for 30 minutes in the dark at room temperature.
8. Add 1 mL of FluoroFix™ Buffer and vortex immediately for at least 10 seconds.
9. Centrifuge at 300 x g for 5 minutes, decant to discard supernatant
10. Resuspend cells of each tube in 350  $\mu$ L of FluoroFix™ buffer

11. Interrogate by flow cytometry using proper machine settings. Acquire samples within 2 hours.

RRID AB\_3698993 (BioLegend Cat. No. 347205)

## Antigen Details

<b>Structure</b>	MPO is a tetrameric protein, each tetramer contains a two 60 kD heavy units and two 12 kD light units. It is a lysosomal hemoprotein stored in azurophilic granules.
<b>Distribution</b>	Neutrophils, monocytes, and some acute myeloid leukemia cells
<b>Cell Type</b>	Leukemia, Monocytes, Neutrophils
<b>Biology Area</b>	Immunology
<b>Molecular Family</b>	Enzymes and Regulators
<b>Antigen References</b>	1. Goedken M, <i>et al.</i> 2007. <i>J. Biol. Chem.</i> 282:27994 2. Nauseef WM, <i>et al.</i> 1988. <i>Euro. J. Haemat.</i> 40:97 3. Kelebanoff SJ, <i>et al.</i> 1999. <i>Proc. Assoc. Am. Phys.</i> 111:383
<b>Gene ID</b>	<a href="#">4353</a>

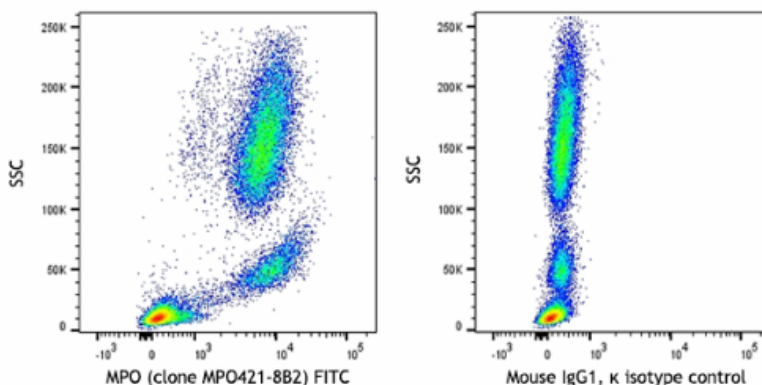
## Related Protocols

- [Intracellular Flow Cytometry Staining Protocol](#)

## Other Formats

FITC anti-human MPO Flow Kit, FITC anti-human MPO, PE/Cyanine7 anti-human MPO, APC anti-human MPO Antibody, PE anti-human MPO

## Product Data



Human peripheral blood leukocytes were fixed and permeabilized, then intracellularly stained with anti-human MPO (MPO421-8B2) FITC (left) or mouse IgG1, κ FITC isotype control (right).

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