



## MPO in the Studies of Myeloid Leukemias and Myeloid Differentiation

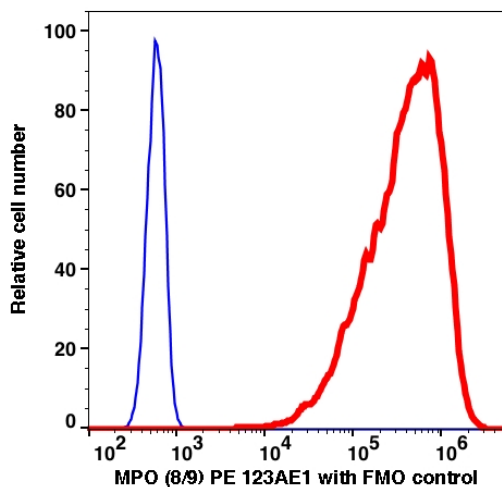
**Myeloperoxidase (MPO)** is present in azurophilic granules of the neutrophil which appear in the promyelocyte stage of differentiation and is expressed in granulomonocytic cells.

**MPO** is a major enzyme involved in the inflammatory responses of polymorphonuclear leucocytes. It has been associated with both a myeloid lineage commitment and favorable prognosis in patients with acute myeloid leukemia (**AML**).

**MPO** was detectable in 3/4 AML with T-lymphoid features, anti-MPO is an excellent marker for the diagnosis and classification of acute leukemia and can be reliably detected by **flow cytometry**. This rapid technique should be a valuable addition to routine immunophenotyping of acute leukemia.

CBI related products have multi-color conjugations available!  
For further information please check our website :

MPO APC (Cat: 112345)	MPO PE (Cat:112325)	MPO PerCP (Cat: 112335)	MPO PE-Cy7 (Cat:112385)	MPO PerCP-Cy5.5 (Cat: 112365)	MPO FITC (Cat:112315)
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Granulocytes gated RBC lysed WBC intracellularly stained with anti-MPO (8/9) PE (RED);  
Granulocytes gated RBC lysed WBC are used as FMO control (BLUE).

References:

1. Detection of myeloperoxidase by flow cytometry in acute leukemia Kazunori Nakase, Mary Sartor, Kenneth Bradstock, 26 December 2002
2. Expression of myeloperoxidase in acute myeloid leukemia blasts mirrors the distinct DNA methylation pattern involving the downregulation of DNA methyltransferase DNMT3B