Caprico Biotechnologies

TECHNICAL DATA SHEET

MPO (8/9)

Type	Size	Catalog number
Unconjugated	100µg	112301
	500µg	112303
FITC	25 tests	112314
	100 tests	112315
	200 tests	112316
PE	25 tests	112324
	100 tests	112325
	200 tests	112326
APC	25 tests	112344
	100 tests	112345
	200 tests	112346
PerCP	25 tests	112334
	100 tests	112335
	200 tests	112336
PerCP-Cyanine5.5	25 tests	112364
	100 tests	112365
	200 tests	112366
PE-Cyanine7	25 tests	112384
	100 tests	112385
	200 tests	112386

Antigen: MPO
Host/Isotype: Mouse, IgG2b, k
Reactivity: Human
Purity: >90% pure tested via polyacrylamide gel electrophoresis (PAGE)
Formulation: PBS, pH7.2, 0.09% NaN_3 (unconjugated)
PBS, pH7.2, 0.09% NaN_3 and 0.2% (w/v) BSA (conjugated)
Storage: Store at 2-8°C and protected from prolonged exposure to light. **Do not freeze.**
Applications: Flow Cytometry

Application Information

Each lot of these antibodies has been pre-titrated and tested by flow cytometric analysis of human PBMCs such that 0.5µg (unconjugated, Biotin) or 5µl (conjugated) of these products are sufficient for staining 1 million cells in a 100µl staining volume or 100µl of whole blood. It is recommended to titrate antibody reactivity empirically for optimal performance.

Antigen Information

The clone 8/9, a mouse monoclonal antibody selectively binds with myeloperoxidase (MPO), a glycoprotein present in the granules of myeloid cells. MPO is critical for an optimal oxygen-dependent microbicidal activity of myeloid cells. The MPO generally appears in the myeloblast stage of myeloid cell differentiation. It is the most common functional protein of myeloid cells and is involved in the process of inflammatory immune responses mediated by myeloid cells. The primary translation product of MPO undergoes glycosylation with the production of 89 kDa heme-free apopro-MPO form followed by incorporation of heme and conversion into the enzymatically active pro-MPO form. Subsequently, pro-MPO becomes targeted to azurophil granules where final processing occurs to produce mature dimeric MPO consisting of the 59-64 kDa MPO alpha-chain and the 14 kDa MPO beta-chain. MPO gene expression may serve as an additional marker for subclassification of acute leukemias and may be used to identify leukemic cells arrested at an early stage of the myeloid differentiation pathway.

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References

1. *Andersson, E. et al. 1998. J Biol Chem. 273:4747-53.*
2. *Murao, S., et al. 1988. Proc Natl Acad Sci U S A. 85:1232-6.*
3. *Nauseef, W. M. 1988. Eur J Haematol. 40:97-110.*
4. *Zaki, S. R. et al., 1989. Blood 74, 2096-102.*

Terms and Conditions

This product is for research use only (RUO) and not intended for diagnostic testing.

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