

Dihydrorhodamine Flow Cytometric Phorbol
Myristate Acetate Test, Blood

Patient ID SAMPLE	Patient Name PATIENT, TEST	Birth Date 1974-08-04	Sex M	Age 50
Order Number SAMPLE	Client Order Number SAMPLE	Ordering Physician SAMPLE	Report Notes Sample Report	
Account Information SAMPLE		Collected 04 Aug 2024 15:02		

DHR Flow PMA, B

Absolute Neutrophil Count

2579 cells/mcL

SDL

Reference Value
1700–7000

% PMA ox-DHR+

99.7 %

SDL

Reference Value
≥95

MFI PMA ox-DHR+

89.57 MFI

SDL

Reference Value
≥60

Control Absoulte Neutrophil Count

5987 cells/mcL

SDL

Control % PMA ox-DHR+

100.0 %

SDL

Reference Value
≥95

Control MFI PMA ox-DHR+

78.25 MFI

SDL

Reference Value
≥60

Interpretation

① SDL

Normal neutrophil oxidative burst observed in shipping control and patient sample after neutrophil stimulation with PMA. Result does not appear to be consistent with skewed lyonization and associated X-linked Chronic Granulomatous Disease (CGD) in a female carrier or an autosomal recessive form of CGD. Recommend correlation with clinical and family history.

ADDITIONAL INFORMATION

The assay involves measurement of NADPH oxidase activity in neutrophils (from sodium heparin blood) after stimulation with either PMA or fMLP. The relative proportion (%) of neutrophils for oxidative burst (DHR fluorescence) after PMA or fMLP stimulation is determined. Additionally, the mean fluorescence intensity (MFI) post-stimulation is determined.

A false-positive result for abnormal DHR fluorescence may be obtained in patients with complete myeloperoxidase deficiency, however, visual and quantitative assessment (MFI) of the DHR flow data can differentiate between CGD and MPO deficiency.

Received: 05 Aug 2024 14:57

Reported: 05 Aug 2024 15:02

Laboratory Notes

- ① Analyte Specific Reagent: This test was developed and its performance characteristics determined by Mayo Clinic. It has not been cleared or approved by the U.S. Food and Drug Administration.

Performing Site Legend

Code	Laboratory	Address	Lab Director	CLIA Certificate
SDL	Mayo Clinic Laboratories - Rochester Superior Drive	3050 Superior Drive NW, Rochester MN 55905	Nikola Baumann Ph.D.	24D1040592