

The expert channel for platelet measurement

- ✓ Accurate and precise platelet counts –even with thrombocytopenic samples
- ✓ Evaluates the current status of thrombopoiesis with IPF
- ✓ Avoids interferences – uses reagents specific for platelets
- ✓ Supports the monitoring of thrombocytopenia with automatic reflex measurements
- ✓ Optimise your workflow with the ‘TWO’ add-on

A platelet count you can rely on

PLT-F provides more reliable information than the impedance count: Thanks to its high measurement accuracy in the low concentration range, this platelet count is comparable to the reference method (CD41/CD61).



Girl with unclear thrombocytopenia

The IPF supports quick and efficient differential diagnosis of thrombocytopenia as it initially suggests whether its cause is in the bone marrow or in the peripheral blood. In patients with unclear thrombocytopenia, the TWO add-on triggers PLT-F analysis to make the relevant clinical information of IPF available.



PLT-F

PLT-F APPLICATION

Know more.
Decide with confidence.
Act faster.

Workflow automation

- Reduce turnaround time in your laboratory: you will no longer need an additional and time-consuming platelet count (counting chamber or immunoflow cytometry).
- PLT-F is only used when required. Severely thrombocytopenic samples and those with unreliable impedance counts trigger an automatic reflex test.
- Streamline your entire platelet workflow with the optional Thrombopoiesis Workflow Optimisation (TWO) add-on on *Extended IPU*.

Know you can rely on the PLT count

- Accurate and precise platelet counts directly from your routine analyser.
- The fluorescence marker specifically labels platelets and no other blood cells, which minimises interferences.
- In many scientific research articles PLT-F was found to be highly correlative with the reference method*.

Immature platelet fraction (IPF)

- Rapid and fully automated quantification of the immature platelet fraction (IPF and IPF#).
- The immature platelet fraction IPF supports the differential diagnosis of thrombocytopenia*.

Diagnostic parameters

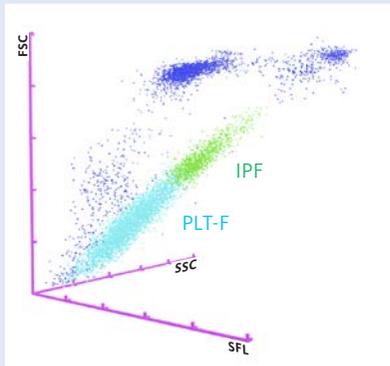
- PLT-F – fluorescence platelet count, equivalent to the CD41/CD61 reference method
- IPF% – the immature platelet fraction enumerates the platelets most recently produced in bone marrow
- IPF# – the absolute immature platelet count

Research parameter

- H-IPF – high-fluorescence immature platelet fraction

Measurement technology

The PLT-F and IPF counts are highly precise because the PLT-F channel analyses a larger sample volume: compared to the impedance measurement, a 5-fold counting volume is used. Aspiration volumes in whole blood mode remain at 88 μ L, though, and the PLT-F profile can even be analysed in the prediluted mode, which is particularly advantageous for the IPF measurement of newborns for supporting the differential diagnosis of neonatal thrombocytopenia*.



Fluorescence flow cytometry

The membranes of the platelets are perforated while they remain largely intact during this process. Subsequently, the fluorescence marker specifically labels the RNA inside the platelets, avoiding interferences with other cells or fragments of similar size.

Reflex testing

For samples with an inaccurate count caused by abnormalities or a very low platelet count, the analyser automatically performs a reflex measurement in the dedicated platelet measurement channel PLT-F.

Thrombopoiesis Workflow Optimisation (TWO)

The optional TWO add-on embedded in the *Extended* IPU optimises PLT-F triggers. Once you have the TWO installed on your *Extended* IPU, it additionally checks if previous samples of a patient have been measured using the PLT-F channel. This is to ensure comparable PLT values throughout the follow-up of the patient, so PLT-F gets triggered as a reflex whenever necessary – for example, if the previous sample showed a significant difference between the PLT-F and the impedance count. For unknown patients with unclear thrombocytopenia the TWO also triggers a PLT-F measurement to make the IPF value available for supporting the differential diagnosis.

* For references to independent publications, please visit www.sysmex-europe.com/academy/library/publications or contact your local Sysmex representative.

Benefit from more background information in our freely accessible educational articles: www.sysmex-europe.com/whitepapers