

HumaCount 5D^{CRP}

5-part diff and C-Reactive Protein from one drop of blood

- > Precise immune status assessment with excellent WBC differentiation
- > Direct capillary blood process for easy and painless sampling
- > Customized testing solutions

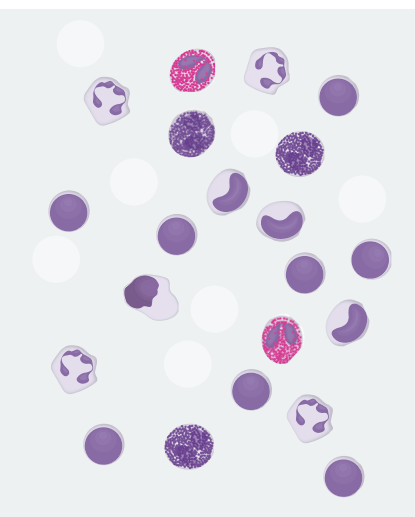







Distinct 5-Part Differential

Precise immune status assessment

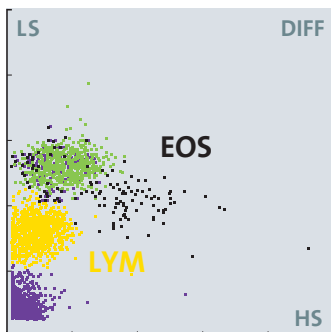
Get a clear picture of immune status with improved 5-part differential

Our 5-part differential analysis breaks down white blood cells into five crucial sub-populations, providing vital information about immune response and disease types.

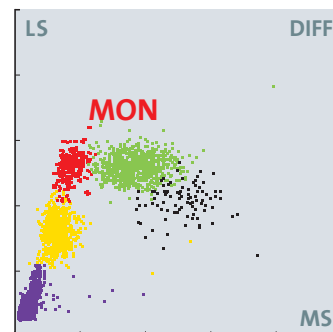
Leucocytes	Parameter		
		LYM – Lymphocytes	Viral infections
		MON – Monocytes	Chronic infections Inflammations
		NEU – Neutrophils	Bacterial infections Stress
		EOS – Eosinophils	Parasitic diseases
		BAS – Basophils	Leukemia Allergies

Enhanced 5-part differentiation with 3D scatter technology

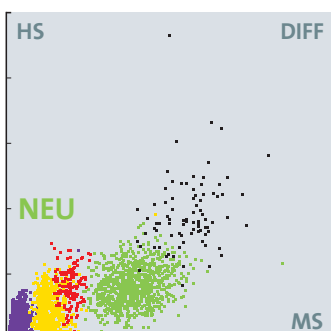
3D scatter technology provides clear differentiation of white blood cell subpopulations, such as Lymphocytes (LYM), Neutrophils (NEU), Basophils (BAS), Eosinophils (EOS) and Monocytes (MON). Moreover, it enables the identification of immature and activated cells such as NRBC, LIC, and ALY. This enables an accurate and comprehensive analysis of the immune system.



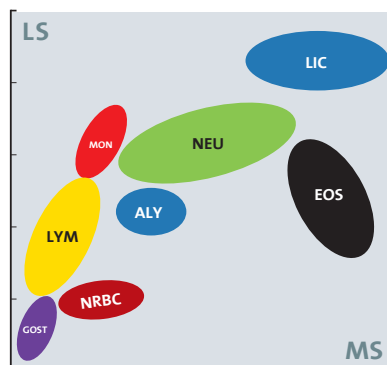
Scatter angle 1



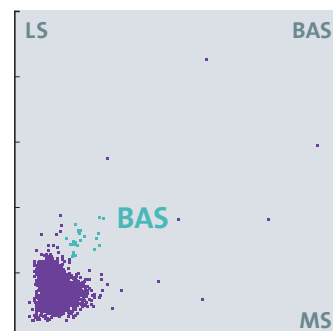
Scatter angle 2



Scatter angle 3



At a glance scatter diagram with 5-part diff, LIC, ALY and NRBC



Dedicated BAS detection channel

HumaCount 5D^{CRP}

Innovations you can count on

Compact stand-alone system

- > Up to 60 samples per hour
- > Up to 40 samples per hour incl. CRP
- > Results for a 5-part diff and CRP within 1.5 minutes
- > Sample volume: 20 µl
- > 2D barcode target value transfer



Movie

Comprehensive diagnostic insights with 32 parameters

- > CRP, RBC, MCV, HCT, RDW-SD, RDW-CV, HGB, MCH, MCHC, PLT, MPV, PCT, PDW, P-LCC, P-LCR, WBC, LYM#, LYM%, MON#, MON%, NEU#, NEU%, EOS#, EOS%, BAS# and BAS%
- > Additional research parameters such as ALY#, ALY%, LIC#, LIC%, NRBC# and NRBC%.

Fast diagnosis and treatment decisions with CRP for inflammation detection

Clear distinction between viral and bacterial infections prevents the overuse of antibiotics. Automated hematocrit correction and traceability to international reference standard ensures accurate results.

Precise immune status assessment with excellent WBC differentiation

Exceptional differentiation of LYM, NEU, MON, BAS and EOS with 3D scatter technology. Further reduces the need for manual blood count by detecting immature and activated cells such as NRBC, LIC and ALY.

Flexible and cost efficient analysis with mode switch function

Optimize your costs by reducing reagent consumption. Choose from different testing combinations: 5-part diff, CRP, and CBC-count individually or in combination for each sample.

Satisfied patients with quick, simple, and painless blood collection

Accurate capillary blood analysis comparable to venous blood. Requires only a total capillary blood volume of 20 µl.

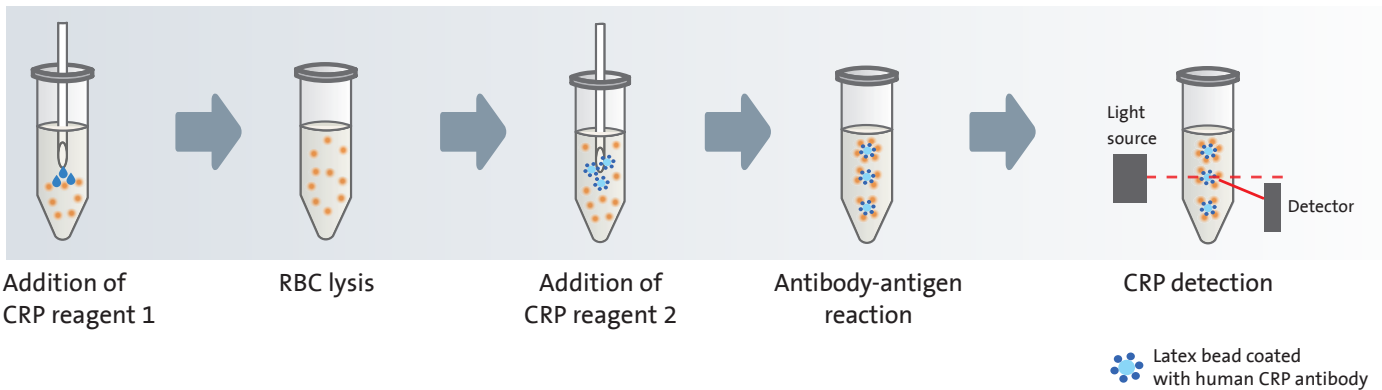
Detect Inflammations with CRP

Fast diagnosis and reliable treatment decisions

Distinguish bacterial from viral infection

CRP detection is an aid to the diagnosis of inflammations or infections and can be used for disease and treatment monitoring. Several studies have shown that CRP in combination with the WBC parameters can be helpful to distinguish bacterial infection from viral infection and avoid the overuse of antibiotics.¹ CRP has a fast kinetic and the levels in the blood increase rapidly when a condition causes inflammation. Although “normal” CRP levels vary from lab to lab, it is generally accepted that a value of 0.8-1.0 mg/dL (or 8-10 mg/L) or lower is normal.²

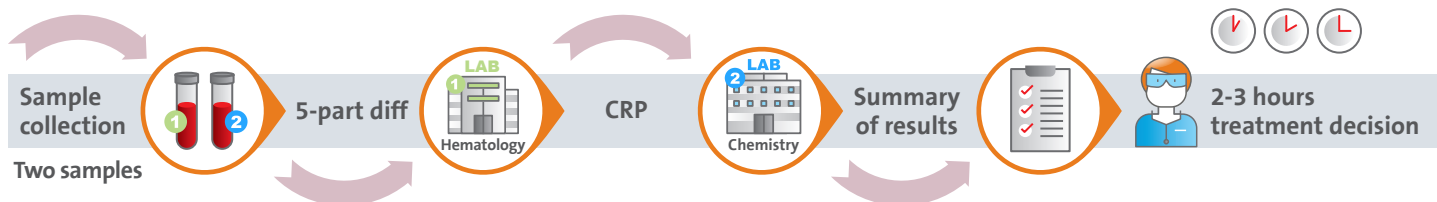
Immunoturbidimetric CRP measurement process



Improve efficiency and quality of clinical examination

- > Fast results in 1.5 minutes for timely treatment planning
- > Enhanced efficiency and cost savings by eliminating the need for additional testing
- > Pinpoint infections: Unveil bacterial or viral infections with CRP and WBC parameters
- > Help combat antimicrobial resistance by avoiding unnecessary antibiotic prescriptions

Conventional time-consuming workflow



Fast results for an immediate treatment decision



Direct Capillary Blood Process

Satisfied patients with simple and painless blood collection

OptimalCount Technology – accurate and convenient

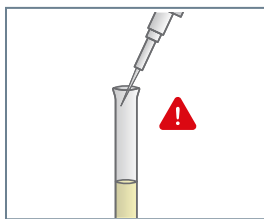
- > Accuracy as exact as for venous samples
- > Blood volume defined by capillary tube
- > Total sample volume 20 μ l and almost no dead volume
- > Dilution defined by auto-diluent dispensing
- > No manual steps needed

Capillary blood – simple and painless blood collection

- > No physician needed to collect capillary blood
- > Quick, simple and less painful blood collection
- > Especially beneficial for infants and small children, elderly with fragile veins and severely burned patients
- > Equally suitable for use with children and adults

Conventional capillary mode – error prone manual method

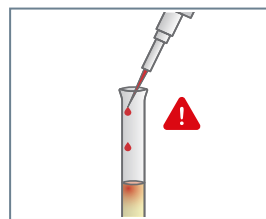
In contrast, the conventional capillary mode involves numerous error-prone manual steps that result in incorrect dilution ratios. Furthermore, the low number of cells counted in a pre-diluted sample leads to significantly reduced accuracy with conventional analyzers



Manual preparation of NaCl solution



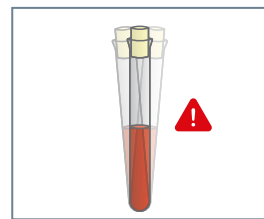
Incompatible diluent



Manual dispensing of blood sample



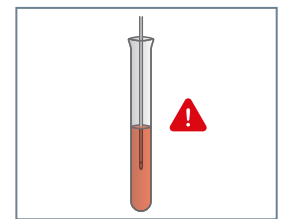
Pipetting error



Dilution of sample



Incorrect dilution ratios, insufficient volumes



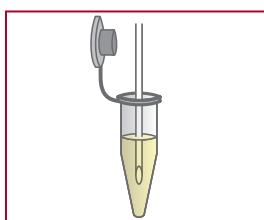
Limited volume of the sample is aspirated



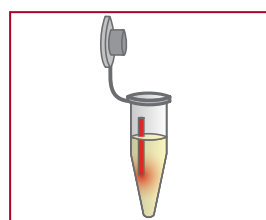
Low no. of cells counted out of pre-diluted sample

Direct capillary blood process with OptimalCount Technology

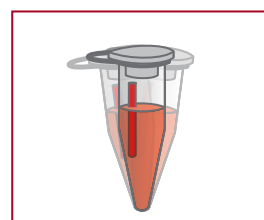
OptimalCount Technology ensures correct dilution ratios through auto-diluent dispensing, utilizes blood volume defined by the capillary tube, and performs a count of ~3000 cells. This combination of factors leads to high accuracy, typically achievable only with venous samples.



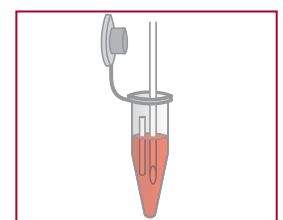
Exact diluent auto-dispensing by analyzer



Blood collection by capillary tube of exactly 20 μ l volume



Mix sample with defined dilution ratio.



Automatic aspiration and analysis of the completely diluted sample

Mode Switch Function

Flexible and cost-efficient with one click

Customized testing solutions: tailored analysis and cost savings

Tailored analysis:

Analyze only the parameters needed for each patient sample, avoiding unnecessary testing. Focus on relevant information.

Enhanced flexibility:

Benefit from our option to easily switch between five testing combinations, 5-part differential, CRP, and CBC count for each sample.

Cost optimization:

Reduce reagent consumption and associated costs by customizing testing based on specific patient needs.

Versatile tube compatibility:

Support for small and large EDTA tubes, Eppendorf tubes, and capillary tubes.

Mode	CRP	CBC	Diff
1	✓	✓	✓
2		✓	✓
3	✓	✓	
4	✓		
5		✓	

STAT samples require fast action

A new sample is recorded with a one-hand operation. When the sample is positioned under the needle for aspiration, the recording of parameters is started with the same hand by depressing the large red switch.

Automated printout and data transfer via LIS are supported.



HumaCount 5D^{CRP} system reagents

	REF		REF
HC5D-Diluent (20 l)	16450/10	HC5D-Control (3-level, 2 x 3 x 3 ml)	16450/40
HC5D-CBC-Lyse (200 ml)	16450/20	CRP-Control (3-level, 3 x 1 ml)	16451/40
HC5D-Diff-Lyse (500 ml)	16450/30	HC-Calibrator (1 x 2 ml)	17400/50
HC5D-Clean (50 ml)	16450/60	CRP-Calibrator (6-level, 6 x 0.5 ml)	16451/50
CRP-Reagent Kit (1 x 75 ml, 1 x 25ml)	16451/70		

References

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