

NEW

H 7100

Fully Automated 6-part differential Hematology Analyzer

**Deeper Insights,
Better Care**

**INBUILT
AI CUBE
TECHNOLOGY**



**Fluorescence
Flowcytometry**



**70+
Parameters**



**Throughput upto
100 Samples/hour**

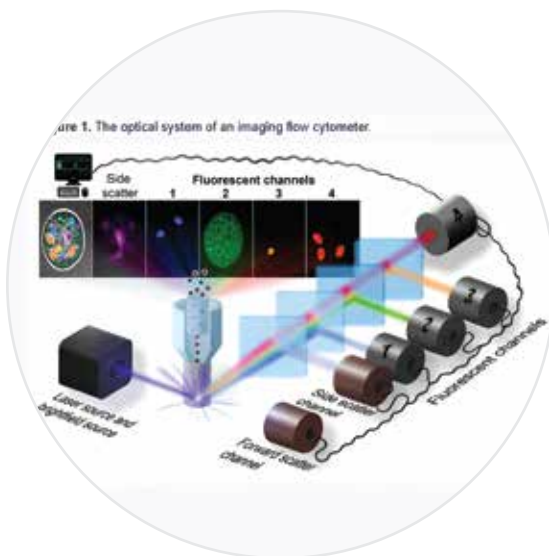
Making Automation Affordable
for labs Everywhere

H 7100

Fully Automated 6-part differential Hematology Analyzer

Designed to redefine hematology analysis, this state-of-the-art diagnostic instrument promises a paradigm shift in blood analysis capabilities, catering to the intricate needs of clinical laboratories and research facilities.

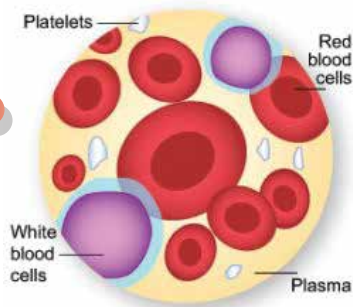
An extensive parameter range, featuring the Retics Panel, Immature Platelet Fraction (IPF), and Immature Granulocytes (IG), empowers healthcare professionals to conduct meticulous assessments of various hematological conditions. The array of data points not only aids diagnosis but also supports research endeavors, offering a wealth of information for analysis and interpretation.



Cutting-Edge Technology

ERBA H7100 provides cutting edge technology combining the **laser scattering**, **fluorescent method**, and **flow cytometry** in WBC differentials and reticulocyte measurement enabling advanced analysis of cell size, complexity, and fluorescence offering detailed differentiation of WBC subtypes and accurate quantification of reticulocytes, providing valuable insights into various hematological conditions and improving diagnostic precision.





Dependable Assays

A comprehensive panel of **70 parameters** offers precise diagnosis of various diseases including anemia, leukemia, infection and inflammation. It provides in-depth analysis of red and white blood cell morphology, hemoglobin levels, platelet counts and more, enabling accurate detection and monitoring of a wide range of hematological conditions.



Efficient Handling

An **autoloader with 60 samples loading capacity** streamlines workflow, saving time and reducing manual handling errors, enabling continuous sample loading, allowing for efficient processing of a large volume of samples with minimal user intervention.



Effortless Interaction

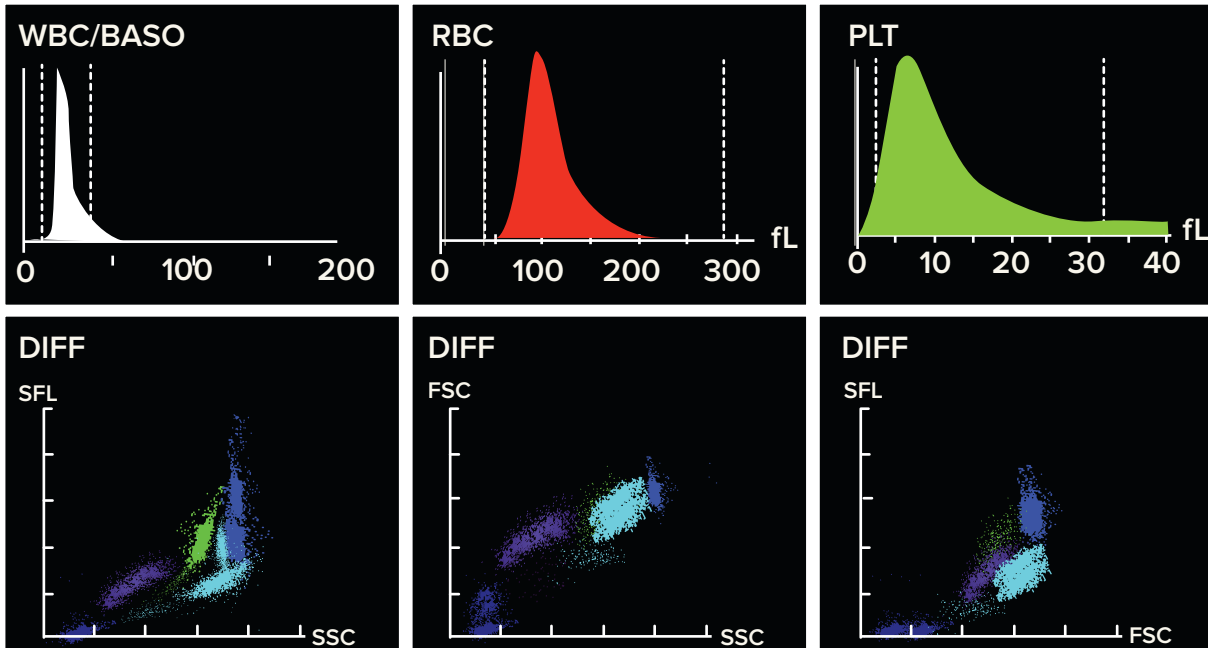
The touch screen display on H7100 provides intuitive navigation and user-friendly interaction, simplifying operation, data input, and result interpretation, enhancing overall usability and efficiency in the laboratory setting.

AI Cube Technology: Advancing Insights into AML and ALL Cases



Empowers clinicians with deeper insights into AML and ALL cases, enabling faster diagnosis and significantly improving turnaround time (TAT). By simplifying comprehensive data analysis and enhancing reporting efficiency, it offers excellent correlation with microscopy, streamlining the diagnostic workflow.





Interpreting Scatterplots

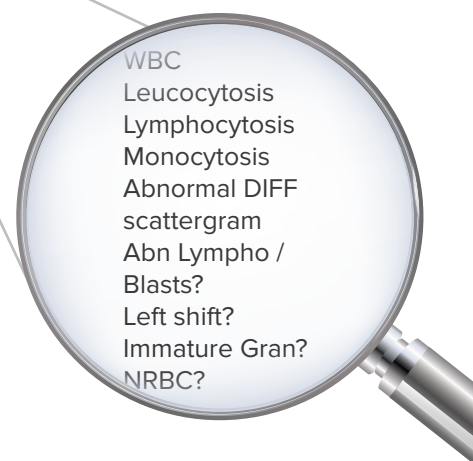
ERBA H7100 provides scattergrams and histograms giving essential visual representations of cellular characteristics and abnormalities and cell populations based on size and complexity, aiding in the identification of anomalies such as blasts or atypical lymphocytes.

Name: _____		Gender: _____	Age: _____	Sample No.: _____
Sample Type: _____		Bed No.: _____	Department: _____	Medical Record No.: _____
Time time: _____		Patient Type: _____	Diagnosis: _____	

S.No	Parameters		Result	Unit	Ref. range	Flag Info
1.	WBC	&H	22.56	10 ³ /μL	3.50 - 9.50	WBC Leucocytosis Lymphocytosis Monocytosis Abnormal DIFF scattergram Abn Lympho / Blasts? Left shift? Immature Gran? NRBC? RBC Anemia PLT Thrombopenia PLT Clumps?
2.	Neu%	R	43.9	%	40.0 - 75.0	
3.	Lym%	R	27.6	%	20.0 - 50.0	
4.	Mon%	RH	27.0	%	3.0 - 10.0	
5.	Eos%	R	1.2	%	0.4 - 8.0	
6.	Bas	R	0.3	%	0.0 - 1.0	
7.	Neu#	&H	9.91	10 ³ /μL	1.80 - 6.30	
8.	Lym#	&H	6.23	10 ³ /μL	1.10 - 3.20	
9.	Mon#	&H	6.10	10 ³ /μL	0.10 - 0.60	
10.	Eos#	&	0.27	10 ³ /μL	0.02 - 0.52	
11.	Bas#	&	0.06	10 ³ /μL	0.00 - 0.06	
12.	IG%	R	41.6	%		
13.	IG#	&	9.39	10 ³ /μL		
14.	RBC	L	2.26	10 ⁶ /μL	3.80 - 5.80	
15.	HGB	L	6.6	g/dL	11.5 - 17.5	
16.	HCT	L	20.9	%	35.0 - 50.0	
17.	MCV		92.3	fL	82.0 - 100.0	
18.	MCH		29.4	pg	27.0 - 34.0	
19.	MCHC		31.8	g/dL	31.6 - 56.0	
20.	RDW-CV	H	20.0	%	11.0 - 16.0	
21.	RDW-SD	H	63.8	fL	35.0 - 56.0	
22.	PLT	RL	8	10 ³ /μL	125-350	
23.	MPV		***	fL	6.5 - 12.0	
24.	PDW		***	fL	9.0 - 17.0	
25.	P-LCR		***	%	11.0 - 45.0	
26.	P-LCC		***	10 ⁹ /μL	30 - 90	
27.	PCT		***	&	0.108 - 0.282	
28.	*WBC-D	R	22.56	10 ⁹ /L		
29.	*TNC-D		23.28	10 ⁹ /L		
30.	*IME%	R	0.0	%		
31.	*IME#	&	0.00	10 ⁹ /L		
32.	*NLR	R	1.59			
33.	*PLR		*** **			
34.	*HFC#	&	0.07	10 ⁹ /L		
35.	*HFC%#	R	0.3	%		
36.	*NRBC#	&	3.2	10 ¹² /L		
37.	*NRBC%	R	0.71	%		
38.	*Micro%		3.2	%		
39.	*Micro#		11.2	%		
40.	*Macro%		17.7	%		
41.	Marco#		0.40	10 ¹² /L		

Unlocking Insights

Flagging in ERBA H7100 involves the automatic identification of abnormal or questionable results, allowing for further review by laboratory professionals. This crucial function helps ensure accurate and reliable analysis of blood samples, enabling timely diagnosis and treatment of various medical conditions.



Screening indices for IDA and Beta Thalassemia

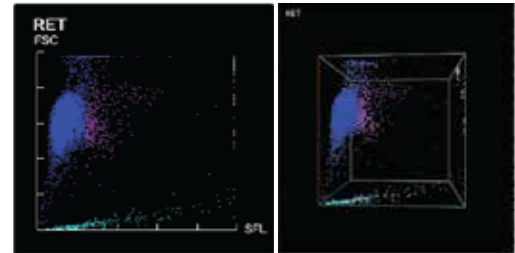
RDWI and Mentzer Index are reliable screening indices with high sensitivity and specificity in microcytic hypochromic anemia cases.

Exploring the Reticulocyte Panel Testing

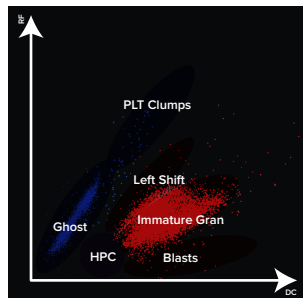
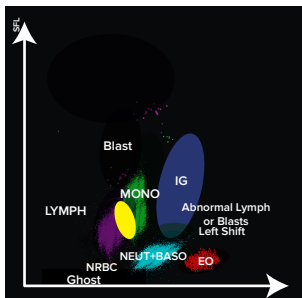
Retic Panel: ERBA H7100 with the Retic Panel offers a real-time snapshot of bone marrow iron status, providing valuable information about the balance between iron and erythropoiesis. It serves as a crucial measure for accelerated iron utilization compared to traditional markers.

The reticulocyte count is utilized to monitor the response to therapy in conditions related to chronic kidney disease, bone marrow failure syndromes, and diagnosis of hemolytic anemia and sickle cell anemia.

Reticulocyte Hemoglobin (RET-He) is proven and recommended in nephrology guidelines (NKF KDOQI). It is sensitive and an early indicator of current iron availability for erythropoiesis. It is used for monitoring erythropoietin and / or IV iron therapy



Unleash the Role of Immature Granulocyte Count



IG: IG count is important in the risk stratification and prognosis of patients with sepsis or other critical illnesses, as elevated levels are associated with increased disease severity and higher mortality rates.

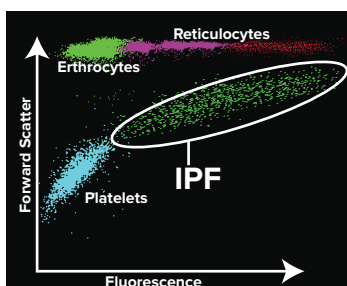
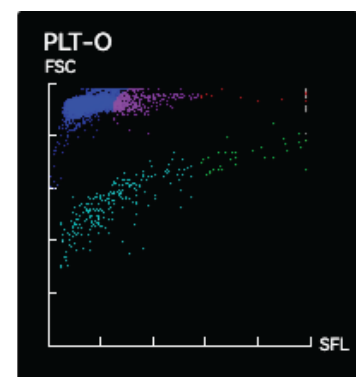
Monitoring IG count over time provides valuable information on the patient's response to treatment and the resolution of the underlying inflammatory process.

An increase in IG count, serves as an early indicator of inflammatory response and aids in distinguishing between infectious and non-infectious causes of leukocytosis.

Optical Platelet (Plt-O)

Optical Platelet (Plt-O) - addresses challenges like pseudo-thrombocytopenia in hematological analysis. Pseudo thrombocytopenia (PTCP) remains a pre-analytical challenge in hematological analysis with multiple etiologies, including improper venipuncture, inadequate mixing blood sample, sample clotting, PLT satellitism, giant or large platelets, and anticoagulant-related platelet. The Optical platelet count reduces the spurious count and is usually useful to correct spurious low platelet counts in EDTA-PTCP patients.

With all this, Erba H7100 is poised to revolutionize hematology analysis, delivering excellence in diagnostics and advancing healthcare through innovation. The H7100 stands out as a cost-effective and comprehensive solution, leveraging sophisticated algorithms and next-generation technology to elevate diagnostic and research efforts in hematology.



Immature Platelet Fraction (IPF)

Immature Platelet Fraction (IPF): Monitoring IPF enables early detection of bone marrow recovery and prediction of platelet engraftment timing, particularly valuable for patients undergoing chemotherapy or stem cell transplantation. It is a novel diagnostic tool to differentiate patients with thrombocytopenia due to increased destruction of platelets from those due to bone marrow/ suppression

References: Retics, IG, Optical Platelet & IPF

Technical Specifications

Test Modes

CBC, CBC+DIFF, CBC+RET, CBC+DIFF+RET, RET, CBC+DIFF(LW), CBC+RET(LP), CBC+DIFF+RET(LW+LP)

*LW: Low WBC (high accuracy and reliable results)

*LP: Low Platelet (high accuracy and reliable results)

37 Reportable Parameters

WBC, Lym%, Mon%, Neu%, Bas%, Eos%, IG%, Lym#, Mon#, Neu#, Eos#, Bas#, IG#, RBC, HGB, HCT, MCV, MCH, MCHC, RDW-CV, RDW-SD, PLT, MPV, PDW, PCT, P-LCR, P-LCC, RET%, RET#, RHE, IRF, LFR, MFR, HFR, IPF %, IPF #, PDW-CV.

34 Research Parameters

WBC-D, TNC-D, IME%, IME#, NLR, LMR, PLR, d-NLR, HFC#, HFC%, NRBC#, NRBC%, Micro%, Micro#, Macro%, Macro#, H-NR%, L-NR%, PLT-I, RBC-O, PLT-O, WBC-O, MRV, RPI, IPF#, H-IPF, FRC#, FRC%, cwbc, Hypo He #, %, Hyper He #, %, Mentzer, RDWI.

Technology

WBC Differential / RET: Fluorescence

Flow Cytometry

RBC: Impedance Method

PLT: Impedance and Optical

HGB: Cyanide – free Colorimetric Method

Throughput

100 Samples/Hour

CBC + DIFF + RET: 65 Samples/Hour

Minimum Sample Volume:

CBC+DIFF - 30 µl

CBC+DIFF+RET - 35 µl

Reagents

7

Histograms & Scattergrams

3 Histograms

Two 3D Scattergrams

Eight 2D Scattergrams

Linearity

WBC: (0.0-500.0) x 10⁹/L

RBC: (0.0-8.6) x 10¹²/L

HGB: (0.0-26) g/dL

HCT: (0.0-75.0)%

PLT: (0.0-5000) x 10⁹/L

LIS

Bi-directional

LIS Protocol

HL7

External Interface

4 USB + 1 LAN port

Touch Screen

12.1 TFT touch screen

Autoloader Capacity

60

Data Storage

Analyser – 150000, PC: 500000

Net Weight

≤ 100

Dimension (mm) (W*H*D)

665 X 870 X 820

Ordering Information

Product Code	Description	Pack size (ml)	Product Code	Description	Pack size (ml)
122325	H 7100 Dil	20000	1195112	H 7 CON L	1 x 3 ml
122326	H 7100 Dil ret	1000	195113	H 7 CON N	1 x 3 ml
122327	H 7100 Lyse 1	500	195114	H 7 CON H	1 x 3 ml
122329	H 7100 Lyse 2	1000	195108	H 7 ret CON L	1 x 3 ml
122336	H7100 Fluro Diff	42 ml	195109	H 7 ret CON N	1 x 3 ml
122334	H7100 Fluro Ret	24 ml	195110	H 7 ret CON H	1 x 3 ml
122398	H Clean for H7100	10 X 4 ml	166092	Elite H CAL	1 x 3 ml

Erba Lachema s.r.o.

Karásek 2219/1d, 621 00 Brno, Czech Republic

Phone: +420 517 077 111

✉ sales@erbamannheim.com

www.erbamannheim.com

Transasia Bio-Medicals Ltd.

An ISO 13485:2016 / 9001:2015 Certified Co.

Transasia House, 8, Chandivali Studio Road,

Chandivali, Andheri (E), Mumbai - 400 072

T: (022) 4030 9000 F: (022) 2857 3030

✉ responses@transasia.co.in

