Extraordinary Performance Redefining Throughput

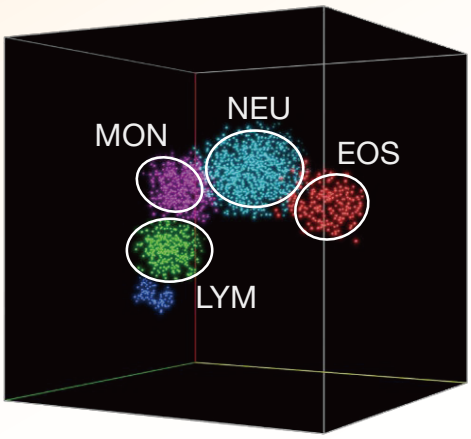
H80 5-Part Hematology Analyzer

EDAN

TRI-ANGLE LASER:
MORE ACCURATE, MORE VISUABLE

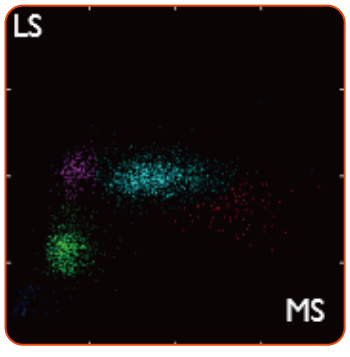
H80 series hematology analyzers utilize the semi-conductor laser technology for WBC differentiation. 3 different angle scatters reflect information of the cells in an all-round way.

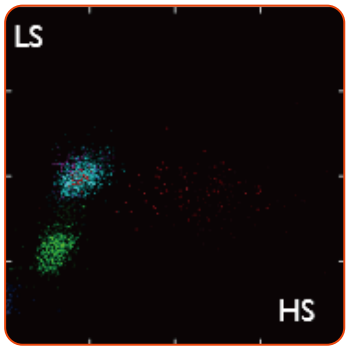
- Low scatter (LS, lower than 10°) reflects cell volume
- Middle scatter (MS, 10° to 20°) reflects cell complexity
- High scatter (HS, more than 20°) reflects cell granularity

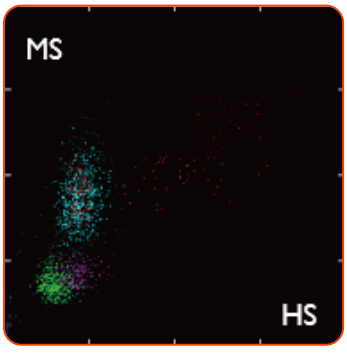


In 3D scattergram, cell clusters are well separated based on 3 different information. Moreover, the rotating 3D scattergram facilities the observation of each cell cluster, making the results more reliable for both normal and abnormal samples.

For example, in the abnormal samples and aging samples, eosinophils are often obscured by other normal cells. By using MS in conjunction with HS to observe the contents, granularities and nucleus of cells, 3D scattergram could more accurately differentiate eosinophils.



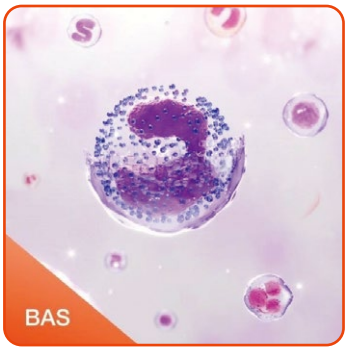


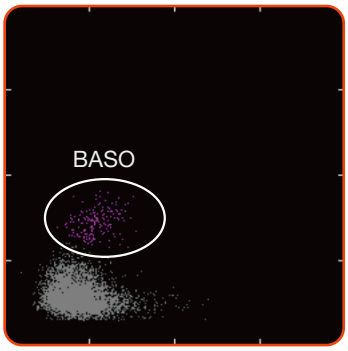


COMPREHENSIVE & RELIABLE SCATTERGRAMS FACILITATE DIAGNOSIS

Dedicated BASO Channel

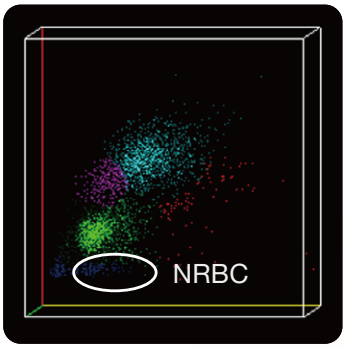
Basophils are the least numerous cells and are easily masked by other cell clusters, which means that they are the most difficult to detect. H80 series have the dedicated baths and channels to accurately detect basophils. Cell volume and cell complexity can be obtained on the specific basophil scattergram.





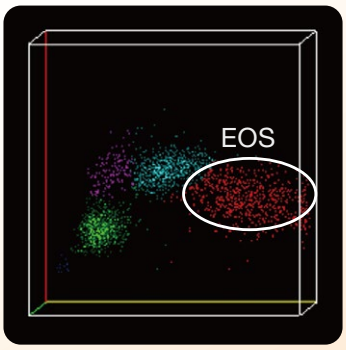
NRBC Flagging

Nucleated red blood cells (NRBCs) are similar in size to lymphocytes, so misidentification of the two types of cells often occurs and produces erroneous white blood cell (WBC) and lymphocyte counts. The H80 can report numerical NRBC results, avoiding incorrectly elevated WBC and lymphocyte counts due to undetected NRBCs.



Eosinophilia Performance

Eosinophils are significantly elevated during bacterial or parasitic infections. Combined with laser technology and 3D scattergram, the H80 can easily handle high eosinophilic samples.



INGENIOUS DESIGN THAT SIMPLY YOUR PROCESS

12.1 inch colorful touch screen

Reagent management via RFID card

80 samples/hour

Cost effective reagents

3 routine reagents with a remarkable two-year shelf life and 90-day on-board stability.

23 µL test volume

Intuitive Operation System

User-oriented interface with
12.1 inch color touch screen

Excellent Technology

Tri-angle laser identifying WBC,
providing comprehensive graphs

High Throughput

80 samples per hour

Cost-effective Solution

3 routine reagents are
needed to minimize the cost

Specification

Parameters

25 reportable parameters:	WBC, LYM%, LYM#, MON%, MON#, NEU%, NEU#, EOS%, EOS#, BAS%, BAS#, RBC, HGB, HCT, MCV, RDW-CV, RDW-SD, MCH, MCHC, PLT, MPV, PCT, PDW, P-LCR, P-LCC
9 research parameters:	ALY%, ALY#, LIC%, LIC#, NRBC%, NRBC#, NLR, PLR, MLR
3 histograms:	WBC, RBC, PLT
4 2D scattergrams:	3*DIFF, 1*BASO
1 3D scattergram:	DIFF

Performance

Parameter	Linearity Range	Precision (CV%)
WBC (10^9/L)	0.0-500.0	≤3.0% (3.50-7.00) ≤2.5% (7.01-15.00)
RBC (10^{12}/L)	0.0-8.5	≤1.5% (3.5-6.5)
HGB (g/L)	0-250	≤1.5% (100-180)
PLT (10^9/L)	0-5000	≤5.0% (100-500)
HCT	0%-67%	≤2.0% (35%-50%)
MCV (fL)		≤1.0% (70-120)

Principles

Semiconductor laser flow cytometry analysis for WBC, DIFF, and BASO counting
Electrical impedance method for RBC, PLT counting
Cyanide-free reagent for HGB with colorimetric method

Sample Volume

Whole blood mode	23 μL
Capillary whole blood mode	23 μL
Pre-diluted mode	20 μL

Reagent

HD600 Diluent 20L
HL610, HL620 Lyse 500mL/1000mL
HC310/HC600 Cleaner 50mL

Operating Environment

Temperature: 15°C~32°C;
Humidity: 30% RH～85% RH;
Air pressure: 70 kPa~106 kPa

Throughput

80 samples per hour

Interface

12.1 inch colorful touch screen

Control and Calibrator

ED-60D, ED-CAL PLUS

Data Storage Capacity

100, 000 results including results and histograms
60 QC files (100 data per file)

Dimension and Weight

330mm(W)*570mm(D)*520mm(H)
Weight: 32.8 KG

EDAN
A world of potential

Global Headquarters:
Edan Instruments, Inc. | 15 Jinhui Road, Pingshan District, Shenzhen
518122 P.R. China | +86.755.26898326 | www.edan.com | info@edan.com
U.S. and Canada inquiries:
EDAN Diagnostics, Inc. | 9918 Via Pasar, San Diego, CA 92126
+1.858.750.3066 | www.edandiagnostics.com | edan-info@edandiagnostics.com

CE 0123

ENG-IVD-H80
V1.1-20240718