bio-techne®
R&D SYSTEMS

AIS168-006 Rev. 04/22

HC WBC Diff

HEMATOLOGY CONTROLS

CONTROL

LOT **HD0525**

2025-08-05

QCP Data Months: MAY, JUN, JUL

Instrument	LEVEL 1 (LOW) LOT HD05251		LEVEL 2 (NORMAL) LOT HD05252		LEVEL 3 (HIGH) LOT HD05253	
HemoCue® WBC DIFF	Assay Mean	Expected Range	Assay Mean	Expected Range	Assay Mean	Expected Range
WBC X 10^9/L	3.2	2.2 - 4.2	8.2	6.2 - 10.2	18.3	15.3 - 21.3
NEU X 10^9/L	0.7	0.2 - 1.2	2.5	1.0 - 4.0	10.1	6.1 - 14.1
NEU %	23	5 - 41	31	13 - 49	55	33 - 77
LYM X 10^9/L	0.8	0.2 - 1.4	2.1	0.6 - 3.6	4.2	0.9 - 7.5
LYM %	26	8 - 44	26	8 - 44	23	5 - 41
MON X 10^9/L	0.1	0.0 - 0.2	0.2	0.0 - 0.4	0.4	0.0 - 0.8
MON %	3	0 - 6	3	0 - 6	2	0 - 4
EOS X 10^9/L	1.3	0.7 - 1.9	2.8	1.4 - 4.2	3.3	0.9 - 5.7
EOS %	40	22 - 58	34	17 - 51	18	5 - 31
BAS X 10^9/L	0.3	0.0 - 0.6	0.5	0.0 - 1.0	0.4	0.0 - 0.8
BAS %	8	0 - 16	6	0 - 12	2	0 - 4

INTENDED USE

HC WBC Diff Control is an assayed whole blood control designed to monitor values obtained from analyzers that measure white blood cell counts in whole blood. Refer to the assay table for specific instrument models.

SUMMARY AND PRINCIPLE

It is an established laboratory practice to use a stable control to monitor the performance of diagnostic tests. This control is composed of stable materials that provide a means of monitoring the performance of hematology blood cell counters. It is sampled in the same manner as a patient specimen.

REAGENTS

HC WBC Diff Control is an in vitro diagnostic reagent composed of human erythrocytes and leukocytes suspended in a plasma-like fluid with preservatives.

PRECAUTION

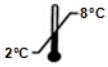
HC WBC Diff Control is intended for ***in vitro*** **diagnostic use** only by trained personnel.

WARNING:

POTENTIAL BIOHAZARDOUS MATERIAL. For in vitro diagnostic use. Each human donor/unit used in the preparation of this product has been tested, and yielded non-reactive / negative results for all conditions referenced in 21 CFR 610.40 (a) (b), as required by the FDA. Testing was conducted using FDA-licensed tests. Additional details can be found at: *http://www.rndheme.com/TechnicalInformation.aspx*

No test method can offer complete assurance that infectious agents are absent; therefore, this material should be handled as potentially infectious. When handling or disposing of vials follow precautions for patient specimens as specified in the OSHA Bloodborne Pathogen Rule (29 CFR Part 1910, 1030) or other equivalent biosafety procedures.

bio-techne®
R&D SYSTEMS



STABILITY AND STORAGE

Store unopened HC WBC Diff Control vials upright at 2 – 8 °C (35 – 46 °F) when not in use**. Protect vials from overheating and freezing**. Unopened vials are stable through the expiration date. Opened vials are stable for 30 days provided they are handled properly.

INDICATIONS OF DETERIORATION

After mixing, product should be similar in appearance to fresh whole blood. In unmixed vials, the supernatant may appear cloudy and reddish; this is normal and does not indicate deterioration. Other discoloration, very dark red supernatant or unacceptable results may indicate deterioration. **Do not use the product if deterioration is suspected.**

INSTRUCTIONS FOR USE

1. Remove vials from the refrigerator and allow to warm to room temperature (15 – 30 °C or 59 – 86 °F) for 15 minutes before mixing.
2. To mix, hold a vial horizontally between the palms of the hands. **Do not pre-mix on a mechanical mixer**.
   a) Roll the vial back and forth for 20 - 30 seconds; occasionally invert the vial. Mix vigorously, but do not shake.
   b) Continue to mix in this manner until the red cells are completely suspended. Vials stored for a long time may require extra mixing.
   c) Gently invert the vial 8 - 10 times immediately before sampling.
   d) Remove cap from vial. Dispense drop of control on Parafilm™ or other appropriate material.
3. Analyze the sample as instructed in the section for “Measuring Control Materials” in the Operator's Manual for your instrument.
4. After sampling:
   a) Clean residual material from the cap and vial rim with a lint-free tissue. Replace the cap tightly.
   b) Return tubes/vials to refrigerator within 30 minutes of use.

EXPECTED RESULTS

Verify that the lot number on the vial matches the lot number on the table of assay values. Assay values are determined on well-maintained, properly calibrated instruments using the instrument manufacturer’s recommended reagents. Operating technique and handling of control may contribute to inter-laboratory variation.

PERFORMANCE CHARACTERISTICS

Assigned values are presented as a Mean and Range. The Mean is derived from replicate testing on instruments operated and maintained according to the manufacturer's instructions. The Range is an estimate of variation between laboratories and also takes into account inherent imprecision of the method and expected biological variability of the control material.

Assay values on a new lot of control should be confirmed before the new lot is put into routine use. Test the new lot when the instrument is in good working order and quality control results on the old lot are acceptable. The laboratory’s recovered mean should be within the assay range.

For greater control sensitivity each laboratory should establish its own mean and acceptable range and periodically reevaluate the mean. The laboratory range may include values outside of the assay range. The user may establish assay values not listed on the Assay Sheet, if the control is suitable for the method.

LIMITATIONS

The performance of this product is assured only if it is properly stored and used as described in this insert. Incomplete mixing of a vial prior to use invalidates both the sample withdrawn and any remaining material in the tube.

TECHNICAL ASSISTANCE AND CUSTOMER SERVICE

For assistance in resolving control recovery problems, please call Technical Service at (800) 523-3395. For additional information on R&D Systems, Inc. hematology controls and calibrators, or to place an order, call Customer Service at (800) 428-4246.

QUALITY CONTROL PROGRAM

For information on CBC-Monitor, our Inter-Laboratory Quality Control Program, call (800) 523-3395 ext. 4435.

R & D Systems, Inc.
614 McKinley Place NE
Minneapolis, MN USA 55413

AIS168-006 Rev. 04/22

EC REP

Bio-Techne SAS
19 Rue Louis Delourmel
35230 Noyal Châtillon / Seiche
France

IVD CE