

# Arkray

## ADAMS A1C HA-8180T

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### Why Choose?

Select the Arkray ADAMS A1C HA-8180T for comprehensive diabetes and beta-thalassemia screening with precision, speed, and clinical confidence—delivering complete hemoglobin profiling that transforms patient care in a single solution.

- "Dual-disease diagnosis: HbA1c, HbA2, and variant hemoglobin in one test"
  - "World's fastest HbA2 analysis—first report in 5.4 minutes"
  - "Complete hemoglobin profiling: diabetes + thalassemia screening combined"
  - "Ultra-precise HPLC technology with CV <2.5% for clinical confidence"
  - "HbE and beta-thalassemia detection accuracy validated in peer-reviewed research"
  - "Compact design, comprehensive scope—perfect for mid-sized laboratories"
  - "Automated cap-piercing sampling with just 14 µL blood volume"
  - "LIS-ready integration with ethernet connectivity for seamless workflow"
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### Unique Selling Points

- **Dual-Purpose Clinical Solution:** All-in-one analyzer for HbA1c (diabetes), HbA2 (beta-thalassemia), and HbF detection with simultaneous hemoglobin variant identification (HbS, HbC, HbE, HbD).
- **World's Fastest HbA2 Analysis:** Incorporates unique HPLC column technology making it the fastest analyzer of HbA2 globally—5.4 minutes to first report, then just 3.5 minutes per subsequent sample.
- **Advanced Reversed-Phase Cation Exchange HPLC:** Delivers highly accurate separation and quantitation of all hemoglobin fractions with dual-wavelength colorimetry (420nm/500nm).
- **Exceptional Analytical Precision:** Within and between-run precision with coefficients of variation (CVs) ranging from 0.6% to 2.5%, ensuring reliable diagnosis of thalassemia and hemoglobin disorders.
- **Comprehensive Measurement Range:** HbA1c (3-20% / 9-195 mmol/mol), HbA2 (2-10%), and HbF detection capability with guaranteed reliable ranges.

- **Minimal Sample Requirement:** Only approximately 14  $\mu$ L of whole blood or hemolysis sample required, supporting multiple patient populations including pediatrics.
  - **Automated Efficiency:** Cap-piercing sampling with optional one-way or loop transportation (maximum 100 samples), color LCD display with built-in thermal printer.
  - **Comprehensive Data Management:** Memory capacity of 500 test results with seamless external communication (Serial port/optional Ethernet) for LIS integration.
  - **Reliable Clinical Performance:** Medically validated for accurate diagnosis of  $\beta$ -thalassemia, HbE disorders, and complete hemoglobin variant detection in routine laboratory settings.
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## Clinical Benefits for Hospital Laboratories

- **Beta-Thalassemia Screening Excellence:** HbA2 elevation ( $>3.5\%$ ) combined with HbA1c and HbF measurement enables accurate identification of beta-thalassemia trait carriers.
  - **Hemoglobin Variant Detection:** Simultaneously detects HbS, HbC, HbE, and HbD while measuring HbA1c, supporting diagnosis of inherited hemoglobin disorders.
  - **Dual-Disease Management:** Comprehensive profiling supports both diabetes management and genetic blood disorder screening in a single test cycle.
  - **LIS-Ready Integration:** External serial and optional Ethernet connectivity enables seamless data transmission and workflow integration with existing laboratory systems.
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## Emergency Testing Performance

- **Ultra-Fast First-Result Turnaround:** 5.4 minutes to initial report, critical for urgent diabetes diagnosis and thalassemia screening in emergency settings.
  - **Rapid Subsequent Testing:** Only 3.5 minutes per sample after initial measurement, maintaining workflow speed during high-volume emergency processing.
  - **Automated Workflow:** Minimal operator intervention with cap-piercing sampling and automated result messaging reduces errors under pressure.
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## Why Hospitals Choose

- **Gold-Standard Diagnostics:** HPLC-based technology with published peer-reviewed clinical validation for thalassemia and hemoglobin variant diagnosis.
  - **Complete Hemoglobin Profiling:** Unique capability to simultaneously measure HbA1c, HbA2, and HbF—no other single analyzer offers this comprehensive scope.
  - **Proven International Performance:** Medically trusted in clinical laboratories worldwide for routine HbA1c quantitation and thalassemia disease identification.
  - **Compact yet Powerful:** 530×530×530mm footprint with comprehensive testing menu—perfect for mid-sized laboratories seeking complete hemoglobin analysis without facility expansion.
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## Transform Your Laboratory Today

Equip your clinical laboratory with the Arkray ADAMS A1C HA-8180T, and unlock comprehensive diabetes and thalassemia diagnostics in a single, trusted platform. Deliver faster, more accurate, and more complete hemoglobin analysis for every patient.

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