



Tina-quant[®] Hemoglobin A1c
Efficiency for your HbA1c testing routine



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The incidence of diabetes is reaching pandemic proportions, impacting patients and healthcare systems across the globe.¹ Evidence suggests, that a majority of patients are undiagnosed or do not achieve recommended blood glucose targets resulting in an increased risk of complications. In this context, HbA1c is viewed as a significant and accepted diabetic marker and has recently been recommended for the diagnosis of diabetes by the ADA.²

Highly specific HbA1c detection

The Roche antibody recognizes the glycosylated N-terminal tetrapeptide of the hemoglobin beta chain, ensuring a highly specific HbA1c detection with no interference from most hemoglobin variants. As a result, 'true' HbA1c is measured as defined by the IFCC reference system.^{3,4}

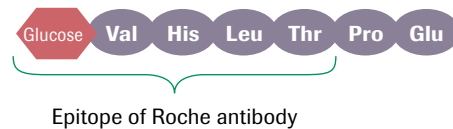


Figure 1: Glycosylated (HbA1c) N-terminal hexapeptide and epitope recognition of the Roche HbA1c antibody

A true result every time – the first time

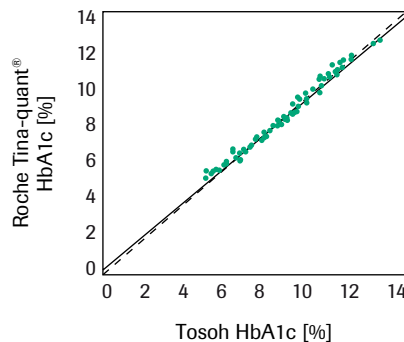


Figure 2: Correlation between HPLC and Roche immunological HbA1c detection.⁵

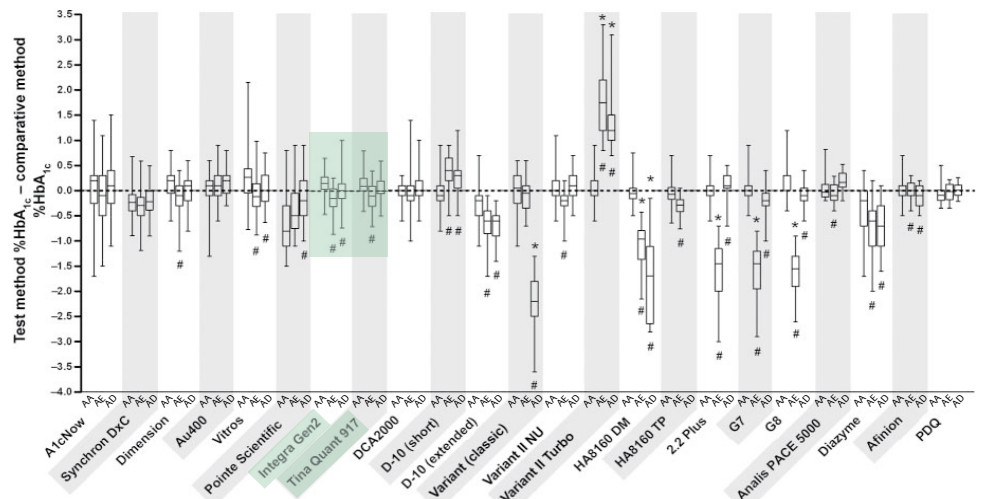


Figure 3: Effects of HbE and HbD traits on HbA1c measurements. Displayed are the absolute differences from HbAA results to the boronate affinity HPLC comparative method (Primus). Statistically significant deviations are marked (#), clinically significant deviations are marked (*).⁶

Continuous improvement of the turbidimetric immunoassay method lead to highly accurate and precise measurement of HbA1c comparable to HPLC methods (Figure 2). Today, more than 50 million HbA1c tests per year are performed on **cobas**® and COBAS INTEGRA® platforms.

Consolidation without compromise

- Easy integration into routine testing for efficiency, cost and workflow improvements
- No post analytical data review (e.g. interpretation of chromatograms)

Clinically significant interference of hemoglobin variants can produce inaccurate results which may lead to unadjusted treatment of glycemia and increase the risk of long-term complications (Figure 3). Due to the high specificity of the antibody, Tina-quant® HbA1c measurement is unaffected by most hemoglobin variants ensuring the right result is reported the first time.

- NGSP certified and traceable to the IFCC and DCCT reference method
- Universal reagent concept: convenient and safe **cobas c** packs
- Comprehensive menu covering key indication areas including diabetes and lipid profile

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References

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- 2 Diabetes Care 2010; 33, suppl. 1, S11-S61.
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- 4 Diabetes Care 2007, 30(9), 2399-2400.
- 5 Data generated by the European Reference Laboratory Zwolle, NL.
- 6 Clinical Chemistry 54, 2008: 1277-1282.