

# Hemoglobin Variant Analysis

**PolyCAT A™** affords the best separations available of hemoglobin variants by cation-exchange. Routine screening can be performed with sample injection every 7'. All major and most minor variants are resolved, including the difficult separation of Hb E from A<sub>2</sub>. Diagnosis of  $\alpha$ -thalassemia is routine, since one can readily measure Hb A<sub>2</sub> levels differing by only 1-2% of the total. Hb A<sub>1c</sub> levels measured with **PolyCAT A™** are typically 20% below those determined by other methods. This has been ascribed to the superior ability of **PolyCAT A™** to resolve Hb A<sub>1c</sub> from other variants that would otherwise be integrated with it.

Typically, a 35x4.6-mm column of 5- $\mu$ m, 1000-Å material (item# 3.54CT0510) has been used for quick screens. A 200x4.6-mm column (item# 204CT0510) was used for confirming runs with samples containing variants. However, our 3- $\mu$ m, 1500Å material in either a 35x4.6-mm column (item# 3.54CT0315) or 50x4.6-mm column (item: 054CT0315) has proven sufficient for both purposes. The 100x4.6-mm column of the 3- $\mu$ m material (item# 104CT0315) affords separations that are probably better than is necessary for routine clinical analyses.

