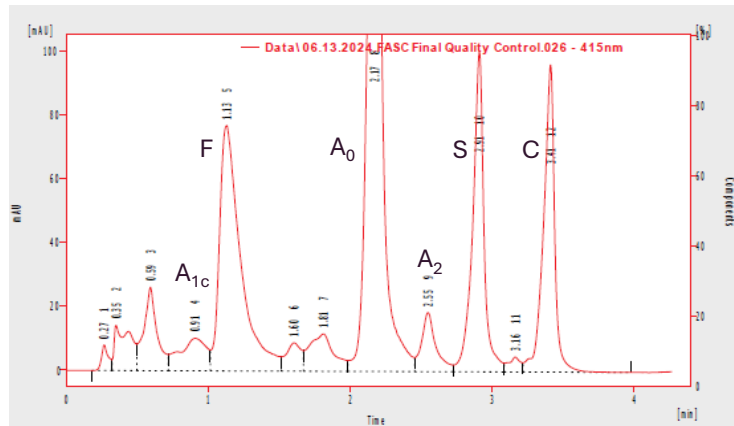
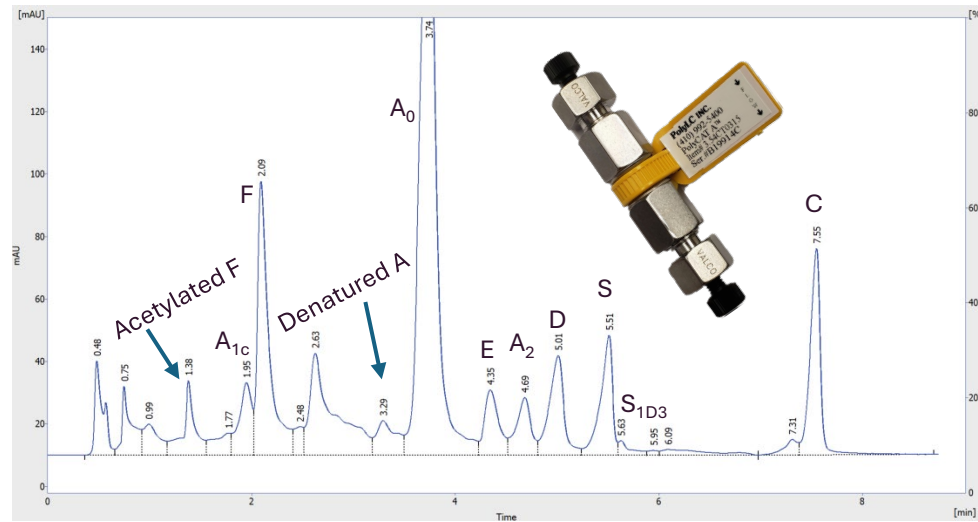


**Hemoglobin Variant Analysis**

PolyCAT A<sup>®</sup> is the gold standard worldwide for analyzing hemoglobin variants by cation-exchange HPLC. The most common variants can be separated in about 3 minutes with excellent quantitation and reproducibility. This includes HbA<sub>1c</sub> for the diagnosis of diabetes. A typical chromatogram using a 35 x 4.6mm column with a quick screen gradient is depicted on the right.



**High Resolution Separation and Quick Screening on the Same Column**



Gradient schedules may be modified to gather detailed High-Resolution data using the same column and mobile phases as the quick scan featured above. This is especially helpful when quantifying uncommon variants, such as Hb E, Hb D, or when conducting research involving drug adduct variants.

**Gradient Information and Operating Parameters for Hb Quick Scan**

Column: 35 x 4.6mm PolyCAT A<sup>®</sup> (3µm, 1500Å)

PolyLC Item# 3.54CT0315

Flow Rate: 1.5 ml/min

Back Pressure: 1000 PSI

Detection: 415nm



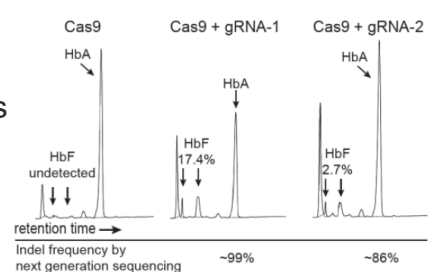
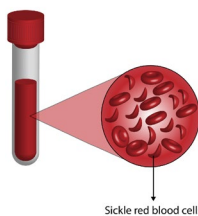
**Mobile Phase A:**  
0.020M Bis-Tris  
0.002M KCN  
pH = 6.90

**Mobile Phase B:**  
0.020M Bis-Tris  
0.002M KCN  
0.200M NaCl  
pH = 6.55



Time	% A	% B
0.00	83	17
0.10	85	15
1.65	62	38
2.15	52	48
2.60	15	85
3.50	5	95
3.60	83	17
4.10	83	17

PolyCAT A<sup>®</sup> is the top choice for genetic engineering applications that are focused on curing hemoglobinopathies



**CRISPR-Cas9 treatment of CD34<sup>+</sup> stem cells**  
E.A. Traxler *et al.*, *Nat Medicine* 22 (2016) 987