

icIEF/CEInfinite System Suitability Kit for FC coated Cartridges

P/N 201051
Product Insert

Introduction

The icIEF/CEInfinite System Suitability Kit is designed to provide users with a convenient method of checking the daily performance of the icIEF/CEInfinite system utilizing the FC-coated cartridges. The kit is compatible with all commercial icIEF systems. The kit components include methylcellulose which is required for analysis using the FC-coated cartridge. The user should confirm proper operation of the icIEF/CEInfinite system if sample analysis results differ from what is expected.

By the kit, the user is allowed to run a control test of the icIEF/CEInfinite system with the FC cartridge on 10 separate occasions. On each occasion, the user may check the system's performance up to six times over a three-day period. At the end of the third day, the opened control samples must be discarded.

The kit contains an IEF solution with carrier ampholytes and pI Markers and a control sample with Hemoglobin A, F, S and C.

Preparation Procedure

Add 2.5 µL of Hb Stock to the IEF Solution. Mark the label of the CA Solution using a marker after the Hb Stock is added. This mixture is the Hemoglobin Control Solution and contains six injections. It is stable for three days when stored at 2 °C to 8 °C.

Set Focus Time

Two-stage focusing process is recommended, which will minimize spurious peaks and baseline noise:

Focus Period	Voltage (V)	Time (mins)
1 (Prefocus)	1500	1.0
2 (Focus)	3000	4.5

Kit Contents

Solution #	Description	Qty/Amt
1	Hemoglobin (Hb) Stock	50 µL
2	IEF Solution 8% pH 3-10 AESlyte™ and two internal pI Markers (4.22, 9.46) in 0.35% Methyl Cellulose (MC)	500 µL x 10

Kit Storage

Store at 2 °C to 8 °C.

Ordering Info

This kit can be ordered by:

- Phone: 1-519-653-6888
- Email: orders@aeslifesciences.com
- Online store: <https://ceinfinite.com/registration/>

Checking your Results

A typical electropherogram of the Hemoglobin Control Solution is shown in Figure 1. The sample contains two pI markers (pI 4.22 and pI 9.46) and four proteins. The four major protein peaks from left to right are: Hemoglobin A (HbA), HbF, HbS and HbC.

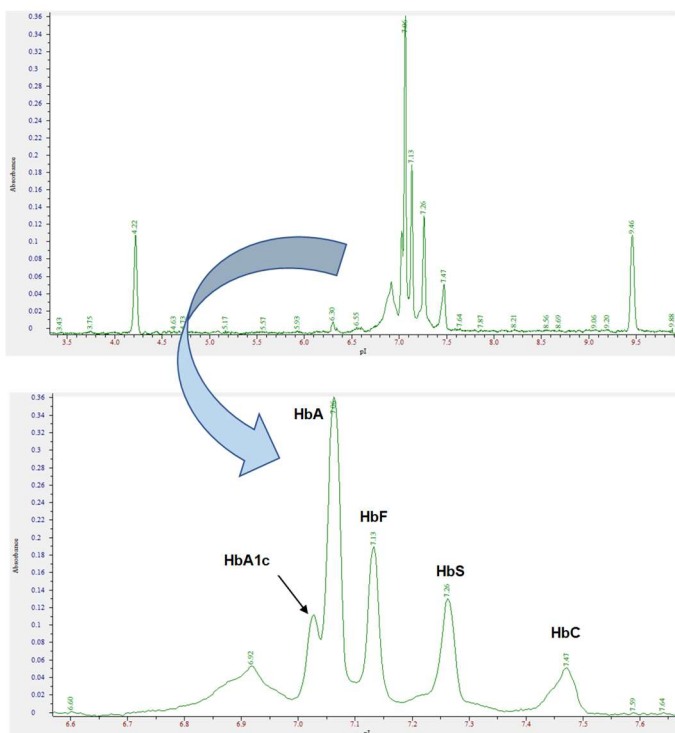


Figure 1. Typical Electropherogram for the Hemoglobin Control Solution.

Calibrate the x-axis of the electropherograms in your runs from position units (pixels) to pI units using icIEF/CEInfinite CFR Software. Table 1 shows the allowable results range when the icIEF system is working properly.

Parameter	Allowable Range
Overall pH range	2 pI Marker peaks observed
Resolution	HbA1c shoulder observed
pI Accuracy	HbA pI value 7.00 ± 0.3
Peak Height (pI marker 9.46)	> 0.05
CV for 3 consecutive injections (pI marker 9.46)	$\leq 10\%$ (peak height)

Table 1. Allowable result ranges.