### Introduction

IEF reference standard pI markers are essential for calibration of isoelectric point (pI) of proteins in CIEF. They possess low molecular weight which makes them stable and resistant to enzyme digestion. The peptide pI markers however, might degrade in the presence of enzymes. The pI markers can be used not only for protein pI calibration but also confirming pH gradient linearity, calibration of icIEF systems and CIEF process control. They can be easily detected at the standard wavelength used at 280nm for CIEF proteins. To ensure precise and consistent pI calibration, at least one pI marker is available within every 0.5 pH unit. A highly comprehensive selection is available from pH 2.85 to 11.20.

The high performance AESlyte<sup>™</sup> carrier ampholytes are complex mixtures of small amphoteric molecules with low molecular weight (200 to 1,200 Da), employed to create a pH gradient when an electric field is applied. These compounds are good carriers of conductivity and exhibit high buffering capacity at their respective isoelectric points (pl). They are widely utilized within specific pH ranges to provide distinct resolution to mixtures of amphoteric substances like proteins. AESlyte<sup>™</sup> carrier ampholytes are extremely stable, exhibit low UV 280nm absorbance, have low interaction with proteins and possess unparalleled controlled lot-to-lot consistency. We provide 3 major ampholyte product lines. Firstly, high resolution (HR) AESlyte<sup>™</sup> are suitable for most proteins like mAbs, ADCs, bispecific and etc. Super high resolution (SH) AESlyte<sup>™</sup> have unique functional groups which improve icIEF resolution for many mAbs when mixed with HR AESlyte<sup>™</sup>. The ultra-high resolution (UH) AESlyte<sup>™</sup> series provides much superior separation resolution for complex proteins such as fusion proteins and enzymes. A diverse range of AESlyte<sup>™</sup> are available from wide (3-10 pH), narrow (8.5-9.5 pH) and high (9-12 pH) ranges available for selection.

## **Preparation Procedure**

The pl markers are ready to be used at 0.5% (v/v) while AESlyte<sup>™</sup> carrier ampholytes are ready to be used at 2-4% (v/v) into a sample

Total Volume:	(100 µL)
AESIyte™ carrier ampholytes	2-4 μL
pl marker 1	0.5 μL
pl marker 2	0.5 μL
sample	x
H <sub>2</sub> 0	Fill up to 100 μL

### Storage

Store at 2 °C to 8 °C. In case of casualties, the pl markers and AESIyte<sup>™</sup> carrier ampholytes should still be stable within two weeks at room temperature.

# Ordering Info

These products can be ordered by:

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

#### Advanced Electrophoresis Solutions Ltd.

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