

# Mix of Proteins

Separation and detection of a standard mix of proteins by capillary electrophoresis and native Laser Induced Fluorescence.

## Instruments:

Capillary Electrophoresis: Agilent CE  
Detector: Picometrics ZETALIF detector  
Laser: DPSS Laser 266 nm, 2 mW

## Sample:

Protein size standard (14.4 – 200 kDa) from Bio-Rad kit for molecular weight determination (ref. 148.4160). Total proteins amount: 20mg/mL. Mean estimated protein amount 2.5 mg/mL but the 8 included proteins are not present at the same level.

## Reagents:

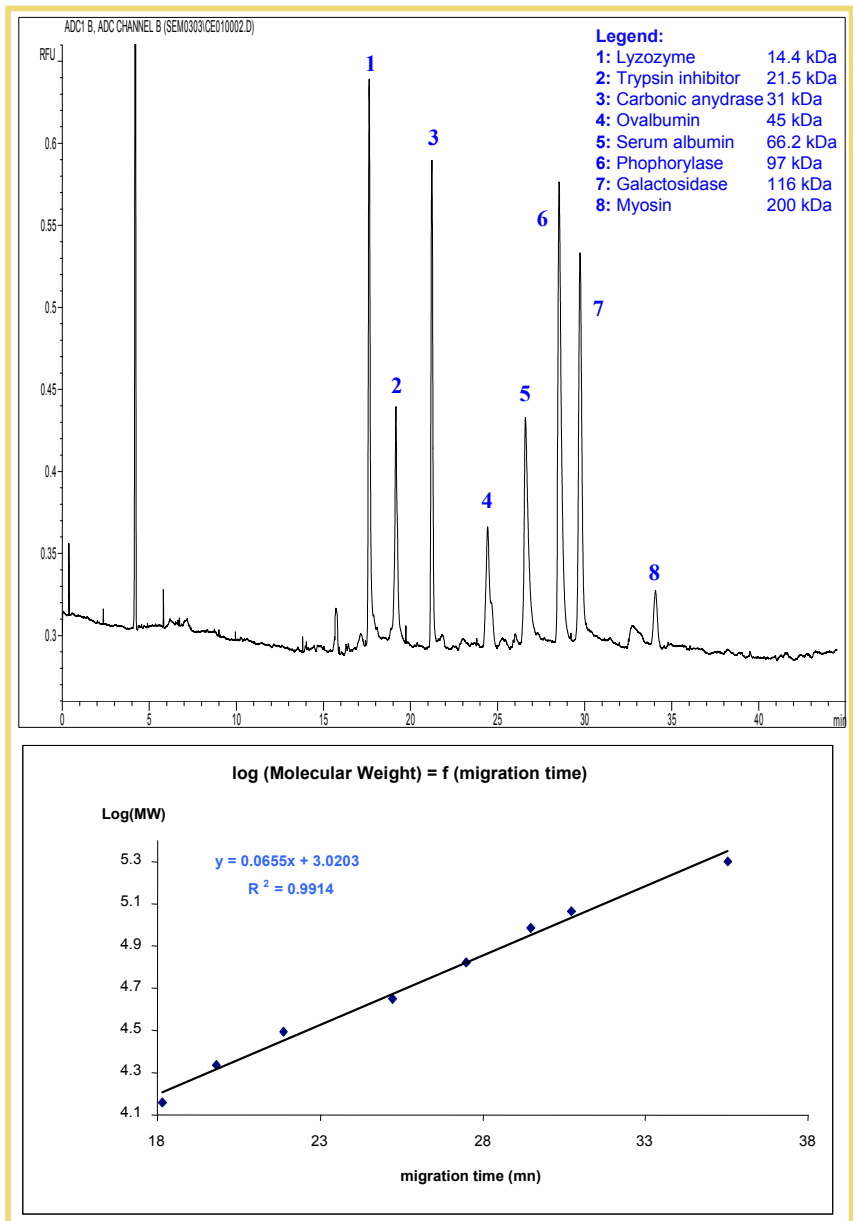
None (Naturally fluorescent compounds)

## Methods:

Capillary: 50 µm ID, 53 cm effective length  
Buffer: Bio-Rad CE-SDS buffer (ref. 148.5032)  
Voltage: -26 kV (-17µA)  
Injection: -10 kV, 30 sec.

\* CE with LIF can provide a rapid and effective method of approximating the molecular weight of proteins.

## Molecular Weight Determination\*



Source: Picometrics application lab. 06/2003