

## Determination of Serum Protein Fractions



*Ideal for teaching in Biochemistry. Thanks to the adaptive carousel, samples can be directly injected in an Eppendorf vial.*

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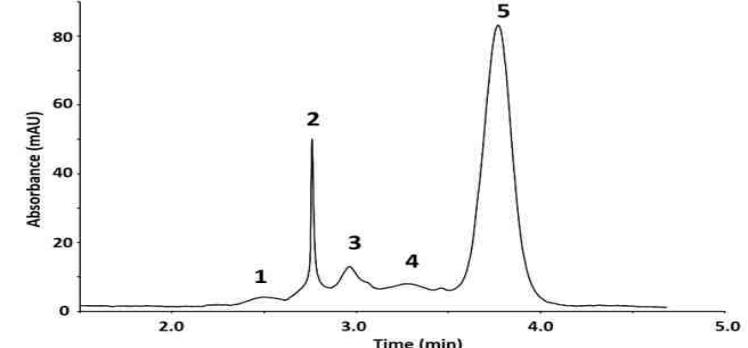
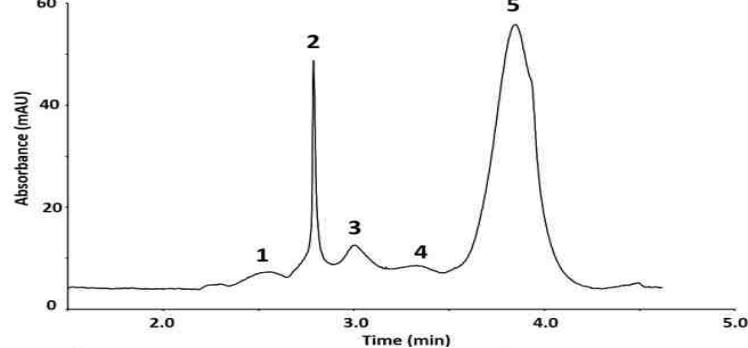
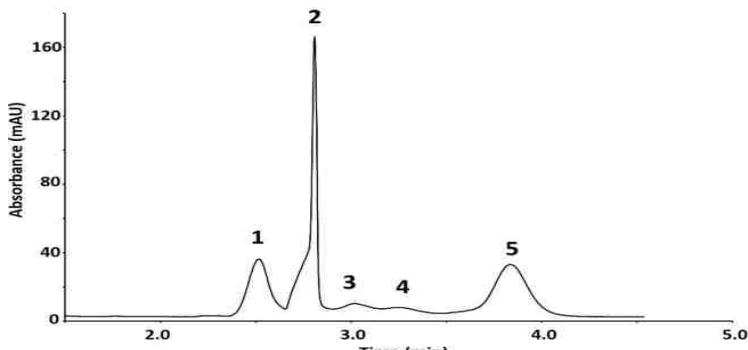
### INTRODUCTION

The method presents the determination of relative amounts of albumin and globulins in human serum using the Wyn-CE system. Identification and quantitation of the analysed proteins is obtained by direct UV absorbance detection at 200 nm.

### SEPARATION CONDITIONS

**Buffer :** Borate, pH 10.0  
**Capillary :** bare-fused silica, L = 30 cm, I = 22 cm, ID = 50 µm  
**Injection :** hydrodynamic, 50 mbar, 8 s  
**Voltage :** +10 kV  
**Detection :** 200 nm, direct  
**Temperature :** 20 °C

### Examples of Serum Protein Fraction Profiles



### Identification :

- 1- γ-globulin
- 2- β-globulin
- 3- α<sub>2</sub>-globulin
- 4- α<sub>1</sub>-globulin
- 5- Albumin

### Advantages of the Capillary Electrophoresis compared to Gel Electrophoresis

- Very Fast Analysis
- Easy to make buffer
- Sample prep : single dilution of serum
- Precision in Quantitative Analysis
- Low Cost of use