

APPLICATION NOTE

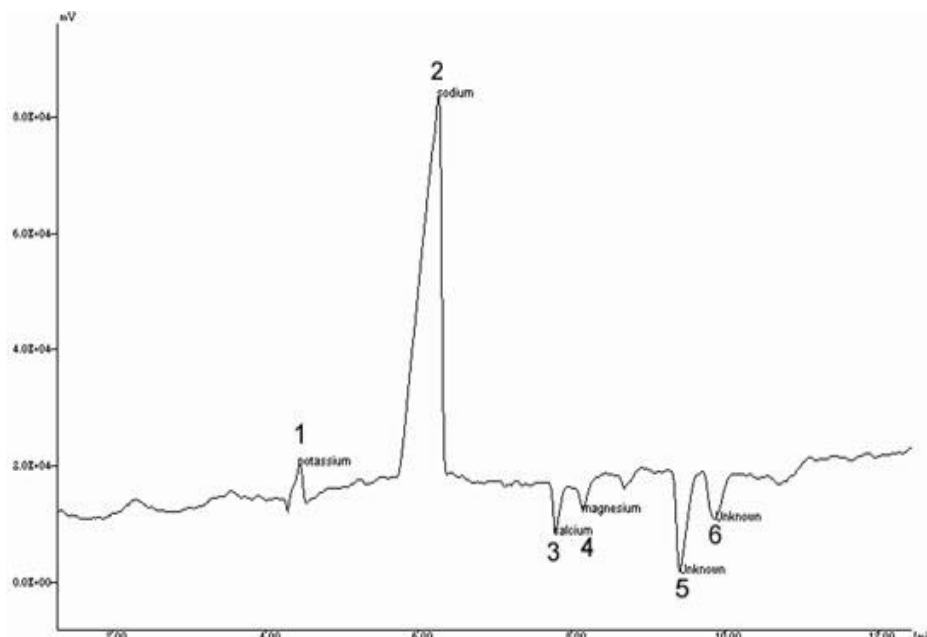
Application Note : 016

Title of application :

Analysis of cations of electrolyte in serum

Area of application :

Clinical analysis



Conditions :

Buffer	CECATC1S
Sample	Human serum : 1. K^+ 2. Na^{2+} 3. Ca^{2+} 4. Mg^{2+} 5 and 6. Unknowns
Capillary	50 μm i.d, 40 cm length;
Injection mode	Hydrodynamic injection
Separation setting	+ 8kV
Instrument used	CE-P1 (Potential gradient detection)

Description :

Analysis of electrolytes in serum is very frequently required in clinical laboratories because of their function of maintaining the osmotic pressure, distribution of water, stability of the acid-base balance. This application note shows capillary electrophoresis with potential gradient detection to be very useful in analysis of cations of electrolytes in serum samples. The analytical method is simple and quick. No sample preparation other than dilution is required before sample injection. Simultaneous analysis of these electrolytes can provide comprehensive information on their concentration levels for clinical uses. Instrumental setup cost and operation cost are low comparing with other methods.