Aldosterone in Urine (Aldo Excretion Rate)

Method:	Enzyme immunoassay (ELISA)
Kit	Immuno-Biological Laboratories, Inc. (IBL-America),
Manufacturer:	Minneapolis, Minnesota 55432, USA
Description:	The IBL-America Aldosterone ELISA Kit is a solid phase enzyme-linked immunosorbent assay (ELISA), based on the principle of competitive binding. Urinary aldosterone excretion rate is a measurement of the amount of aldosterone removed in the urine over a period of time (usually in a day). The steroid hormone aldosterone is a potent mineral corticoid that is produced by the zona glomerulosa of the adrenal cortex in the adrenal gland. The synthesis and release are controlled by the renin-angiotensin aldosterone system (RAAS), as well as by plasma potassium concentration, the pituitary peptide ACTH, and by the blood pressure via pressure sensitive baroreceptors in the vessel walls of nearly all large arteries of the body. Aldosterone binds to mineralocorticoid receptors (MR) and triggers the transcription of hormoneresponsive genes. In consequence, aldosterone increases the blood pressure by reabsorption of sodium, and water from the distal tubules of the kidney into the blood, secretion of potassium into the urine, and elevation of circulating blood volume.

Collection and Performance Characteristics

Tube type:	Preferred: Urine, preserved with Boric Acid (Final concentration of 1g/100ml)
Minimum Volume:	0.5 mL (special aliquot tube)
Special Processing Considerations	
Lowest Reportable Value:	Limit of Blank: 9.8 pg/mL Limit of Detection: 16.94 pg/mL Limit of Quantification: 23.66 pg/mL
Dynamic range:	9.81 pg/mL – 1000 pg/mL.
Precision:	Intra-assay variation is 4.9 – 5.9% Inter-assay variation is 9.4-13.9%
Reference Range:	