

Plasma Renin Activity (PRA)

Method:	Enzyme immunoassay (ELISA)
Kit Manufacturer:	Immuno-Biological Laboratories, Inc. (IBL-America) 8201 Central Ave NE, Suite P Minneapolis, MN 55432
Description:	<p>The Plasma Renin Activity results are expressed in terms of mass of angiotensin-I (Ang-I) generated per volume of human plasma in unit time (ng/mL.h).</p> <p>The immunoassay of Ang-I is a competitive assay that uses two incubations, with a total assay incubation time of less than two hours. During the first incubation unlabelled Ang-I (present in the standards, controls and plasma samples) competes with biotinylated Ang-I to bind to the anti-Ang-I antibody. In the second incubation, the labelled Streptavidin-HRP conjugate, binds to the immobilized Ang-I-Biotin. The washing and decanting procedures remove unbound materials. The colorimetric HRP substrate is added and, after stopping the color development reaction, the light absorbance (OD) is measured in a microwell plate reader. The absorbance values are inversely proportional to the concentration of Ang-I in the sample. A set of calibrators is used to plot a standard curve from which the concentrations of Ang-I in the samples and controls can be directly read.</p>

Collection and Performance Characteristics

Tube type:	Preferred: EDTA Alternate: None
Minimum Volume:	1.0 mL
Special Processing Considerations	Quick freeze the plasma after separation, and store at -20°C or colder Avoid freezing and thawing samples more than once.
Lowest Reportable Value:	1.0 ng/ml/h (0.14 ng/mL of Angiotensin I)
Dynamic range:	0.14 – 60 pg/mL ng/mL of Angiotensin I
Precision:	Intra-assay variation is 6.3 – 8.7% Inter-assay variation is 4.8 – 7.1%
Reference Range:	0.06-4.69 ng/ml.h