

Human Plasma Renin Activity ELISA Kit | PRA elisa kit

Plasma Renin Activity (PRA) ELISA

CATALOG #
AAA14209

REACTIVITY
Human

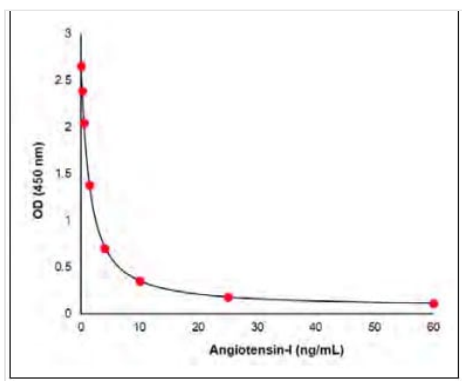
PRODUCT SYNONYMS

Plasma Renin Activity; Plasma Renin Activity (PRA) ELISA; PRA elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Assay Type	Quantitative Competitive
Samples	Human EDTA plasma by an ELISA (Enzyme-Linked Immunosorbent Assay)
Preparation and Storage	2 - 8 degree C

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for PRA elisa kit	Principle of the Assay: Prior to testing plasma samples with the PRA ELISA, a specimen pretreatment step is required. First, a protease inhibitor (PMSF) is added to the sample to prevent the degradation of angiotensin-I. Next, the generation buffer is added to bring the pH of the sample to approximately 6.0. The plasma sample is then pipetted into two aliquots. One aliquot is incubated at 0 degree C (ice bath) and the other is incubated at 37 degree C. Angiotensin-I will be generated by plasma renin in the fraction incubated at 37 degree C. The PRA ELISA is a competitive immunoassay. In the first incubation step, competition occurs between angiotensin-I present in calibrators, controls, specimen samples and an angiotensin-I-biotin conjugate (biotin conjugate) for a limited number of anti-angiotensin-I antibody binding sites on the microplate wells. During this incubation, protease inhibitors are present to prevent the degradation of angiotensin-I into smaller peptides. In the second incubation step, streptavidin-HRP conjugate is added, which binds specifically to any bound biotin conjugate. Unbound streptavidin HRP conjugate is removed by a washing step. Next, the TMB substrate (enzyme substrate) is added which reacts with HRP to form a blue coloured product that is inversely proportional to the amount of angiotensin-I present. The enzymatic reaction is terminated by the addition of the stopping solution, converting the blue colour to a yellow colour. The absorbance is measured on a microplate reader at 450 nm. A set of calibrators is used to plot a calibrator curve from which the concentration of angiotensin-I in specimen samples and controls can be directly read. The plasma renin activity concentration in the plasma sample is calculated from the angiotensin-I concentration in the 0 degree C and 37 degree C aliquots and the generation time used. The plasma renin activity results are expressed in terms of the mass of angiotensin-I generated per volume of human plasma per unit of time (ng/mL/h). Intended Uses: For the quantitative measurement Plasma Renin Activity (PRA) in human EDTA plasma by an ELISA (Enzyme-Linked Immunosorbent Assay).
Product Categories/Family for PRA elisa kit	Cardiovascular; Research Assays; Assay Categories

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/prahuman-elisa-kits/plasma-renin-activity/14209>