St. John Health System

<u>Lab Catalog</u>

Renin Activity, Plasma

Order Name: RENIN ACT
Test Number: 3802425
Revision Date: 10/06/2023

TEST NAME		METHO	DDOLOGY	LOINC CODE
Renin Activity, Plasma		Liquid	Chromatography/Tandem Mass Spectrometr	ry 2915-7
SPECIMEN REQUIREN	IENTS			
Specimen	Specimen Volume (min)	Specimen Type	Specimen Container	Transport Environment
Preferred	1 mL (0.8)	Plasma	EDTA (Lavender Top)	Frozen
Instructions	Notes: 0.8 mL (Note: This volume Does NOT allow for repeat testing.)			
	Specimen Type: Plasma, frozen			
	Container Detail: Lavender-top (EDTA) tube			
	Specimen Storage: FREEZE			
	Specimen Collection: Draw blood into an EDTA tube. Keep tube at room temperature. Centrifuge at room temperature. Transfer the plasma into a			
	plain screw cap pour off tube. Freeze immediately and maintain frozen until tested. IT IS CRITICAL THAT THE PLASMA BE TRANSFERRE			
	AND FROZEN AS QUICKLY AS F	POSSIBLE TO PREVENT CRYOAC	TIVATION OF PROTEIN TO RENIN (WHIC	H RESULTS IN FALSELY
	ELEVATED RENIN LEVELS). To	avoid delays in turnaround time whe	n requesting multiple tests on frozen sample	s, PLEASE SUBMIT SEPARATE
	FROZEN SPECIMENS FOR EACH	TEST REQUESTED.		
	Special Instructions: The patient's posture at the time of collection should be noted (see Patient Preparation).  Specimen Stability: Ambient: Unstable, Refrigerated: Unstable, Frozen: 14 days			

GENERAL INFORMATION		
Expected TAT	3 - 7 days	
Clinical Use	Renin is a proteolytic enzyme produced by the kidney in response to stimulation of renal beta-adrenergic receptors or by circulating catecholamines. Erect posture, exercise, sodium depletion, hemorrhage, and low cardiac output all increase renin secretion via one or more pathways.  The measurement of plasma renin activity (PRA) is useful in evaluating hypertension. A normal or high PRA rules out primary aldosteronism, whereas a normal or low PRA helps rule out renal hypertension. Additionally, an elevated PRA may indicate renovascular hypertension due to renal artery stenosis.	
Notes	The renin in plasma is allowed to act on the plasma's endogenous substrate, angiotensinogen producing angiotensin I. This is measured by liquid chromatography/mass spectrometry (LC/MS-MS).	
CPT Code(s)	84244	
Service Provided By	labcorp Oklahoma, Inc.	