**ANGIOTENSIN CONVERTING ENZYME, SERUM**  
( Spectrophotometry)

**U/L**  
8.00-65.00

**Comments**
Angiotensin converting enzyme (ACE) modulates peripheral vascular resistance as well as renal and cardiovascular function. It is responsible for conversion of Angiotensin I to Angiotensin II as well as inactivation of bradykinin. Majority of ACE is tissue bound (> 90%) found predominantly in lungs & testes.

**Factors affecting ACE levels:**
- Smoking – ACE activity is 30% lower in smokers
- Thyroid hormone- Stimulates ACE synthesis
- Postmenopausal estrogen replacement – ACE activity is 20% lower

**Increased levels**
- Sarcoidosis – ACE levels are used in the diagnosis and monitoring of this disease and are directly related to the number of organs affected and activity of granulomas. Mature granulomas produce less ACE than developing ones. ACE is more likely to be elevated with pulmonary involvement than with purely hilar adenopathy.
- Pulmonary causes like Emphysema, Asthma, Small cell carcinoma & Squamous cell carcinoma
- Renal diseases – patients on hemodialysis show high ACE levels as compared to patients who are not on dialysis.
- Other causes – Multiple sclerosis, Addison’s disease, Hyperthyroidism, Diabetes, Alcoholic hepatitis & Peptic ulcer

**Decreased levels**
- Chronic liver disease
- Anorexia nervosa
- Hypothyroidism