

## EIA for Quantitative Determination of anti-Angiotensin II Receptor 1 (AT1)-Antibodies

### Introduction

Angiotensin II is a peptide hormone which causes vasoconstriction, increased blood pressure, and release of aldosterone from the adrenal cortex. It occupies an important role in the Renin-Angiotensin-System (RAS). Angiotensin II mediates the effects through G-Protein-coupled receptors, the Angiotensin receptors. The occurrence of autoantibodies against AT1 receptor is associated with an increased risk of an immunologic rejection after an organ transplantation. The presence of AT1 autoantibodies correlate with the existence and course of Sklerodermia. The CellTrend anti-Angiotensin receptor 1-Antibody EIA is designed for the determination of antibodies against the Angiotensin II receptor subtype I in serum and plasma.

### Principle of the assay

The CellTrend anti-Angiotensin II receptor 1- Antibody-EIA is an antibody screening test. Angiotensin II Receptor has been pre-coated onto a microtiter plate. During the first incubation the anti- Angiotensin II receptor 1-Antibodies of the samples are immobilised on the plate. The autoantibodies are detected with a POD labeled anti-human IgG antibody. In the following enzymatic substrate reaction the intensity of the colour correlates with the concentration and/ or avidity of anti-Angiotensin II receptor 1-antibody.

### Performance Characteristics

*Standard curve:* 5 standards between 2.5 U/ml and 40 U/ml

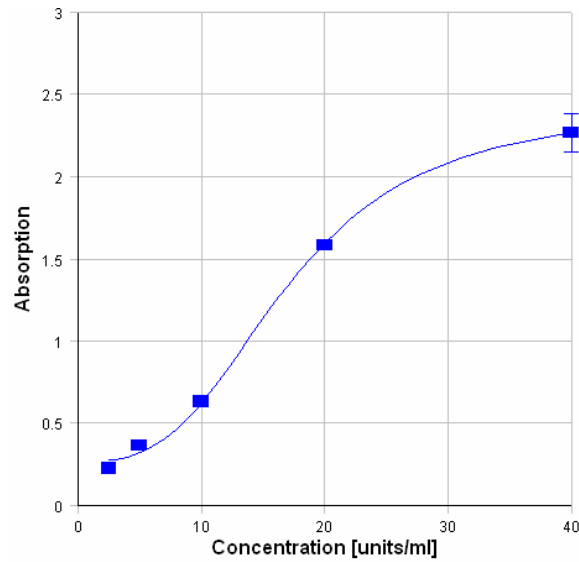
*cut off:* 20 U/ml

*Sample materials:* Serum, Plasma

*Intraassay-Precision:* 6.88%

*Interassay-Precision:* 11.45%

### Typical Standard Curve



### Assay Procedure

Incubation of samples/ standards/ controls 100  $\mu$ l 2 hrs, 4°C  
Wash  
Incubation of detection antibody 100  $\mu$ l 1 hr, room temperature  
Wash  
Substrate incubation 100  $\mu$ l/well 20 min, room temperature  
Add Stopp solution 100  $\mu$ l/well  
Read at 450nm