



# EIA for Quantitative Determination of anti- $\alpha$ 1-adrenergic-Receptor-Antibodies

## Introduction

The  $\alpha$ -1 adrenergic receptor is a G protein-coupled receptor. It consists of three highly homologous subtypes, including  $\alpha_{1A}$ -,  $\alpha_{1B}$ -, and  $\alpha_{1D}$ -adrenergic. Catecholamines like noradrenaline and adrenaline signal through the  $\alpha$ -1 adrenergic receptor in the central and peripheral nervous systems. The occurrence of auto-antibodies against  $\alpha$ -1 adrenergic-receptor is associated with the existence of malignant hypertension.

The CellTrend anti- $\alpha$ 1-adrenergic-receptor-antibody-EIA is designed for the determination of Antibodies (IgG) against the  $\alpha$ 1-adrenergic-receptor in serum.

## Principle of the test

The CellTrend anti- $\alpha$ 1-adrenergic-receptor-antibody-EIA is an antibody screening test. The  $\alpha$ 1-adrenergic-receptor has been pre-coated onto a microtiter plate. During the first incubation the anti- $\alpha$ 1-adrenergic-receptor-antibodies of the samples are immobilised on the plate. The auto-antibodies 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- $\alpha$ 1-adrenergic-receptor-antibodies.

## Performance Characteristics

### Standard curve:

5 standards between 2,5 U/ml and 40 U/ml

cut off:

> 7.0 U/ml negative

7.0 – 11.0 U/ml at risk

> 11.0 U/ml positive

Sample materials: Serum

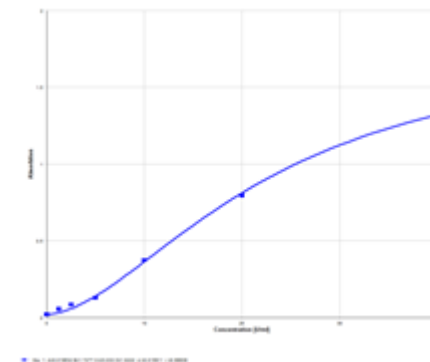
- Intra-assay precision (CV)  
(n=10)

Sample 1 (7.2 Units): 4.1%

- Inter-assay precision (CV)  
(n=10)

Sample 1 (7.4 Units): 4.1%

## Typical Standard Curve



## Assay Procedure

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

## Order informations

Product	Catalog number	Price (€)
EIA for Quantitative Determination of anti- $\alpha$ 1 AR AA, 1x96 determ.	12400	950,-