EIA for Quantitative Determination of anti-β2-adrenergic Receptor Antibodies

Introduction

The β-2 adrenergic receptor is a G protein-coupled receptor. β receptors have the subtypes β_1, β_2 and β_3. Autoantibodies against β2 adr-r are significantly elevated in patients suffering from chronic fatigue syndrome (CFS) / myalgic encephalomyelitis (ME). β-2 adrenergic receptor (b2 adr-r) autoantibodies are present in a subset of 20-30% of chronic fatigue syndrome patients.
The CellTrend anti-β2-adrenergic-receptor-antibody-EIA is designed for the determination of antibodies (IgG) against the β2-adrenergic-receptor in serum and plasma.

Principle of the assay

The CellTrend anti-β2-adrenergic-receptor-antibody-EIA is an antibody screening test. The β2-adrenergic-receptor has been pre-coated onto a microtiter plate. During the first incubation the anti-β2-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-β2-adrenergic-receptor-antibodies

Performance Characteristics

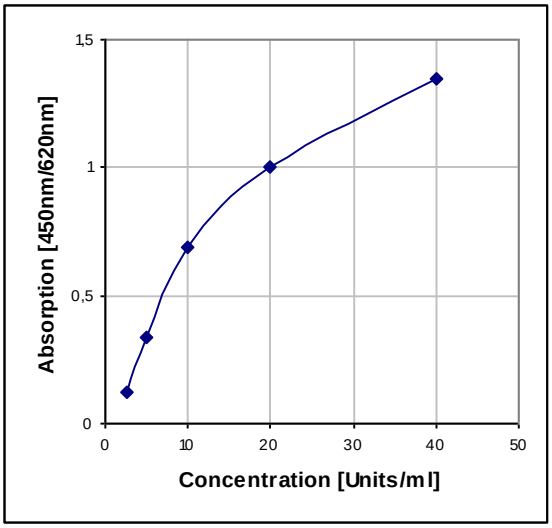
Standard curve:
5 standards between 2.5 U/ml and 40 U/ml

cut off (Löbel et al, Brain Behav Immun 2015):
positive (95% percentile): 14.0 Units/ml
at risk (90% percentile): 8.0 – 14.0 Units/ml

Sample materials:
Serum

Intraassay-Precision:
(n=10)
Sample 1 (25.2 U/ml): 4.2%
Interassay-Precision:
(n=12)
Sample 1 (27.6 U/ml): 3.8%

Typical Standard Curve



Assay Procedure

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

Order informations

Product	Catalog number	Price (€)
EIA for Quantitative Determination of anti-β2 AR AA, 1x96 determ.	12700	950.-

CE *In vitro*-Diagnostikum

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