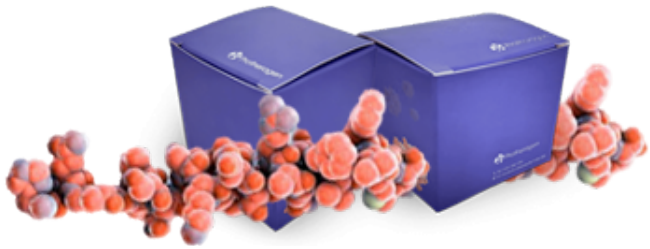
Protheragen Obesity



Human beta 3 adrenergic receptor (ADRB3) ELISA kit

Cat. No.:	OB0525WXX-337
Assay Type:	Quantitative competitive ELISA
Target Species:	Human
Assay Target:	ADRB3
Size:	48T; 96T

This product is for research use only and is not intended for diagnostic use.

Product Overview

Description	Human beta 3 adrenergic receptor (ADRB3) ELISA kit is a ready-to-use ELISA kit f or analyzing human ADRB3 levels with a sensitivity of 1.0 pg/mL.
Assay Principle	The kit is based on a competitive enzyme immunoassay technique using a polyclona l anti-ADRB3 antibody and an ADRB3-HRP conjugate. The assay sample and buffer ar e incubated with the ADRB3-HRP conjugate on a pre-coated plate for one hour. At the end of the incubation period, the wells are decanted and washed five times. The wells are then incubated with HRP enzyme substrate. The product of the enzym e reaction with the substrate forms a blue colored complex. Finally, the reactio n is stopped by adding a stop solution, which turns the solution yellow. The col or intensity is measured spectrophotometrically at 450 nm on a microplate reader . The color intensity is inversely proportional to the concentration of ADRB3 be cause the ADRB3 in the sample competes with the ADRB3-HRP conjugate for the bind ing site of the anti-ADRB3 antibody. Since there is a finite number of binding s ites, as more sites are occupied by ADRB3 in the sample, there are fewer sites l eft to bind the ADRB3-HRP conjugate. A standard curve is plotted between color i ntensity (O.D.) and standard concentration. The ADRB3 concentration in each samp le is derived from this standard curve.

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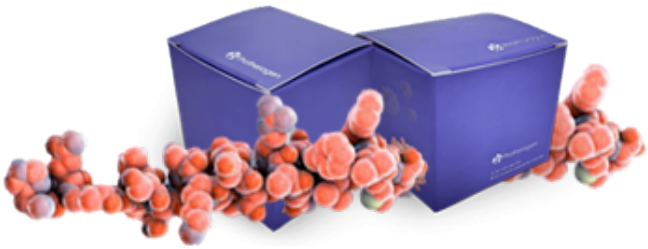

Background	ADRB3, the β3-adrenergic receptor, regulates lipolysis, thermogenesis in brown a dipose tissue, and vasodilation. β3-adrenergic receptor agonists have been found to have significant anti-obesity and anti-diabetic effects. ADRB3 is an attract ive target in anti-obesity research.
Synonyms	β3AR; β3-AR; Beta-3 adrenoceptor
Formula Weight	43,519 Da
Applications	Human beta 3 adrenergic receptor (ADRB3) ELISA kit is designed for the *in vit ro* quantitative analysis of ADRB3 levels in human serum, plasma, cell cultur e supernatants, body fluid, and tissue homogenate samples.
Research Area	Thermogenesis; Lipolysis; Signaling pathways; Metabolism; Adipocyte differentiat ion; Signal transduction; Obesity

Specification

Sample Type	Serum; Plasma; Cell culture supernatants; Body fluid; Tissue homogenate
Sensitivity	1.0 pg/mL
Cross-reactivity	No significant cross-reactivity or interference was observed.
Storage	Store at 2-8°C.

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