



Human 11 beta-hydroxysteroid dehydrogenase type 1 (11β-HSD1) ELISA kit (30-9000 ng/L)

Cat. No.:	OB0525WXX-002
Assay Type:	Quantitative sandwich ELISA
Target Species:	Human
Assay Target:	11β-HSD1
Size:	48T; 96T

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

Product Overview

Description	Human 11 beta-hydroxysteroid dehydrogenase type 1 (11β-HSD1) ELISA kit (30-9000 ng/L) is a ready-to-use ELISA kit for analyzing human 11β-HSD1 levels with a detection range of 30-9000 ng/L and a sensitivity of 15.19 ng/L. This kit has high sensitivity and excellent specificity.
Assay Principle	The plate has been pre-coated with human 11β-HSD1 antibody. The 11β-HSD1 added to the sample binds to the antibody coated on the wells. Biotinylated human 11β-HSD1 antibody is then added and binds to 11β-HSD1 in the sample. Streptavidin-HRP is then added to bind to the biotinylated 11β-HSD1 antibody. After incubation, unbound streptavidin-HRP is washed out. Substrate solution is then added, and color formation is proportional to the amount of human 11β-HSD1. The reaction is terminated by the addition of an acidic termination solution, and the absorbance is measured at 450 nm.
Background	11β-HSD1 catalyzes the reversible conversion of cortisol to the inactive metabolite cortisone and plays a pathogenic role in obesity and metabolic syndrome. It could be utilized as a potential target for anti-obesity studies.
Synonyms	HSD11B1; Cortisone reductase; 11-beta-hydroxysteroid dehydrogenase type 1; NADPH-dependent 11β-HSD1; EC 1.1.1.146
Formula Weight	32,401 Da



Applications

Human 11 beta-hydroxysteroid dehydrogenase type 1 (11 β -HSD1) ELISA kit (30-9000 ng/L) is designed for the *in vitro* quantitative analysis of 11 β -HSD1 levels in human serum, plasma, cell culture supernates, cell lysates, and tissue homogenate samples.

Research Area

Lipid metabolism; Hormone research; Obesity

Specification

Sample Type	Serum; Plasma; Cell culture supernates; Cell lysates; Tissue homogenates
Detection Range	30-9000 ng/L
Sensitivity	15.19 ng/L
Precision (Intra-assay)	CV<8%
Precision (Inter-assay)	CV<10%
Cross-reactivity	No significant cross-reactivity or interference was observed.
Stability	6 Months
Storage	Store at 2-8°C.