



Rat constitutive androstane receptor (CAR) ELISA kit (0.156-10 ng/mL, 0.060 ng/mL)

Cat. No.:	OB0625WXX-243
Assay Type:	Quantitative sandwich ELISA
Target Species:	Rat
Assay Target:	CAR
Size:	24T; 48T; 96T

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

Product Overview

Description	Rat constitutive androstane receptor (CAR) ELISA kit (0.156-10 ng/mL, 0.060 ng/mL) is an ELISA-based <i>in vitro</i> research tool designed specifically for the quantitative detection of CAR in rat with a range of 0.156-10 ng/mL and a specificity of 0.060 ng/mL.
Assay Principle	The microtiter plates in this kit are pre-coated with an antibody specific to CAR. Standards or samples are added to the corresponding microtiter plate wells and the biotin-conjugated CAR-specific antibody. Avidin conjugated to horseradish peroxidase (HRP) is then added to each microtiter plate well and incubated. Upon addition of TMB substrate solution, only wells containing CAR, biotin-conjugated antibody, and enzyme-conjugated avidin will show a color change. The enzyme-substrate reaction is terminated by the addition of sulfuric acid solution, and the color change is measured spectrophotometrically at 450 nm $\pm$ 10 nm. The concentration of CAR in the sample is then determined by comparing the OD of the sample to a standard curve.
Background	CAR is a nuclear receptor and transcription factor primarily known for regulating genes involved in drug metabolism and detoxification.
Synonyms	NR1I3; NR1-I3; CAR1; MB67; Nuclear receptor subfamily 1, group I, Member 3; Constitutive active response; Constitutive activator of retinoid response; Orphan nuclear receptor MB67
Formula Weight	30,262 Da

**Applications**

Rat constitutive androstane receptor (CAR) ELISA kit (0.156-10 ng/mL, 0.060 ng/mL) is used to quantify CAR in tissue homogenates, cell lysates, and other biological fluid samples of rat, providing data to support a wide range of studies.

Research Area

Drug metabolism

Specification

Sample Type

Tissue homogenates; Cell lysates; Other biological fluids

Detection Range

0.156-10 ng/mL

Sensitivity

0.060 ng/mL

Precision (Intra-assay)

CV<10%

Precision (Inter-assay)

CV<12%

Cross-reactivity

No significant cross-reactivity or interference was observed.

Storage

Store at 2-8°C.