

### RayBiotech, Inc.

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# Certificate of Analysis and Data Sheet

# Rabbit anti-Constitutive Androstane Receptor (CAR) antibody

Catalog No:	Isotype:	Speceis:	Accession No:	
130-10003	Rabbit Ig G	Human	NP_001070937	

## Description

Constitutive Androstane Receptor (CAR), a protein that in humans is encoded by the *NR113* gene, also known as nuclear receptor subfamily 1, group I, member 3. CAR is a key regulator of xenobiotic and endobiotic metabolism. CAR contain 352 amino acids and having a molecular mass of 40 kDa. The protein binds to DNA as a monomer or a heterodimer with the retinoid X receptor and regulates the transcription of target genes involved in drug metabolism and bilirubin clearance which affects metabolism of drugs and other xenobiotics, such as cytochrome P450 family members. This protein mainly expressed in liver and lower levers of expression are observed in heart, muscles, kidney and lung.

**Applications** 

Table Summary of antibody applications and working conditions

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA	*			1:8000(at least detecting 125ng/ml)
Western Blotting	*			1:1000-5000(at least)
Enzyme Immunoassay(EIA)			*	
Immunohistology - paraffin			*	
Immunohistology - resin			*	
Immunoprecipitation			*	
Flow Cytometry			*	
Neutralization			*	

Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application

The products are furnished for LABORATORY RESEARCH USE ONLY.

Not for diagnostic or therapeutic use.



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#### Preparation

Immunogen was synthetic peptide derived from human constitutive androstane receptor. This antibody was produced from a rabbit immunized with the immunogen. The IgG fraction was purified from rabbit serum followed by Protein A/G affinity chromatography.

# Specificity

The rabbit anti-human CAR antibody detected specifically target derived from human recombinant protein as well as cell lysate at various concentrations. Cross reactivity with mouse and rat are expected from sequence similarity.

#### Reconstitution

Supplied as lyophilized and purified antibody originally containing PBS, without **Preservative Stabilizers**, liking Sodium Azide. *It final concentration is indicated in shipping vial*.

The antibody is stable for at least years from the data of receipt when stored at  $-20^{\circ}$ C to  $-70^{\circ}$ C. Reconstituted antibody (suggesting with sterile PBS) can also be aliquotted and stored frozen at  $-20^{\circ}$ C to  $-70^{\circ}$ C in a manual defrost freezer for months without detectable loss activity. Upon reconstitution, the antibody can be stored at  $4^{\circ}$ C for 1 month. **Please avoid freeze-thaw cycles.** 

# Storage

Lyophilized samples are stable for a year at least from date of receipt when stored at  $-20^{\circ}$  C to  $-70^{\circ}$  C. Upon reconstitution, the antibody can be stored at  $2^{\circ}$  -  $8^{\circ}$  C for at least a month without detectable loss of activity. *Minimize freezing and thawing*.

#### Reference

Y.C.Yamazaki, et al., The role of the nuclear receptor constitutive androstane receptor in the pathogenesis of nonalcoholicsteatohepatitis.Gut.2007 April; 56(4): 565–574.

J.P. Hernandez, et al., Sexually dimorphic regulation and induction of P450s by the constitutive androstane receptor (CAR). Toxicology. 2009 February 4; 256(1-2): 53–64.

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