

### **AKR7A3 Antibody (Center)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21988c

## **Specification**

## **AKR7A3 Antibody (Center) - Product Information**

Application WB,E
Primary Accession O95154
Reactivity Human
Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG
Calculated MW 37206

# **AKR7A3 Antibody (Center) - Additional Information**

### **Gene ID 22977**

#### **Other Names**

Aflatoxin B1 aldehyde reductase member 3, 1.-.-., AFB1 aldehyde reductase 2, AFB1-AR 2, AKR7A3, AFAR2

# **Target/Specificity**

This AKR7A3 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 187-217 amino acids from the Central region of human AKR7A3.

#### **Dilution**

WB~~1:2000

E~~Use at an assay dependent concentration.

### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

# **Precautions**

AKR7A3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## **AKR7A3 Antibody (Center) - Protein Information**

### Name AKR7A3 (HGNC:390)

**Function** Catalyzes the NADPH-dependent reduction of various carbonyl- containing compounds, including aldehydes, ketones, and toxic products from cellular metabolism or environmental





exposure. Can reduce the dialdehyde form of aflatoxin B1 (AFB1) into alcohol derivatives, via monoaldehydes intermediates. Can reduce the dialdehyde form of aflatoxin B1 (AFB1) into alcohol derivatives, via monoaldehydes intermediates, thus preventing the formation of protein adducts that contribute to AFB1-induced toxicity.

#### **Cellular Location**

Cytoplasm {ECO:0000250|UniProtKB:P38918}.

## **Tissue Location**

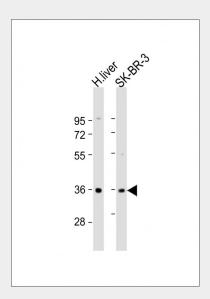
Expressed in colon, kidney, liver, pancreas, adenocarcinoma and endometrium.

## **AKR7A3 Antibody (Center) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

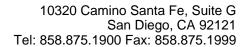
## **AKR7A3 Antibody (Center) - Images**



All lanes: Anti-AKR7A3 Antibody (Center) at 1:2000 dilution Lane 1: human liver lysate Lane 2: SK-BR-3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 37 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

## AKR7A3 Antibody (Center) - Background

Can reduce the dialdehyde protein-binding form of aflatoxin B1 (AFB1) to the non-binding AFB1 dialcohol. May be involved in protection of liver against the toxic and carcinogenic effects of AFB1, a potent hepatocarcinogen.





# **AKR7A3 Antibody (Center) - References**

Knight L.P.,et al.Carcinogenesis 20:1215-1223(1999).

Praml C.,et al.Oncogene 22:4765-4773(2003).

Gregory S.G.,et al.Nature 441:315-321(2006).

Bodreddigari S.,et al.Chem. Res. Toxicol. 21:1134-1142(2008).