

AKR7A2 Antibody (NT)
Rabbit Polyclonal Antibody
Catalog # ABV11291**Specification**

AKR7A2 Antibody (NT) - Product Information

Application	WB
Primary Accession	O43488
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	39589

AKR7A2 Antibody (NT) - Additional Information**Gene ID** 8574Positive Control
Application & Usage**Western blot: 293 cell lysates.**
Western blot: ~1:1000.**Other Names**

AKR7A2; AFAR; AFAR1; AKR7; Aflatoxin B1 aldehyde reductase member 2; AFB1 aldehyde reductase 1; Aldoketoreductase 7; Succinic semialdehyde reductase.

Target/Specificity

AKR7A2

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

100 µl of antibody in PBS with 0.09% (W/V) sodium azide

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions**Precautions**

AKR7A2 Antibody (NT) is for research use only and not for use in diagnostic or therapeutic procedures.

AKR7A2 Antibody (NT) - Protein Information

Name AKR7A2

Synonyms AFAR, AFAR1, AKR7

Function

Catalyzes the NADPH-dependent reduction of succinic semialdehyde to gamma-hydroxybutyrate. May have an important role in producing the neuromodulator gamma-hydroxybutyrate (GHB). Has broad substrate specificity. Has NADPH-dependent aldehyde reductase activity towards 2-carboxybenzaldehyde, 2-nitrobenzaldehyde and pyridine-2- aldehyde (in vitro). Can reduce 1,2-naphthoquinone and 9,10- phenanthrenequinone (in vitro). 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.

Cellular Location

Mitochondrion. Golgi apparatus {ECO:0000250|UniProtKB:Q8CG45}. Cytoplasm

Tissue Location

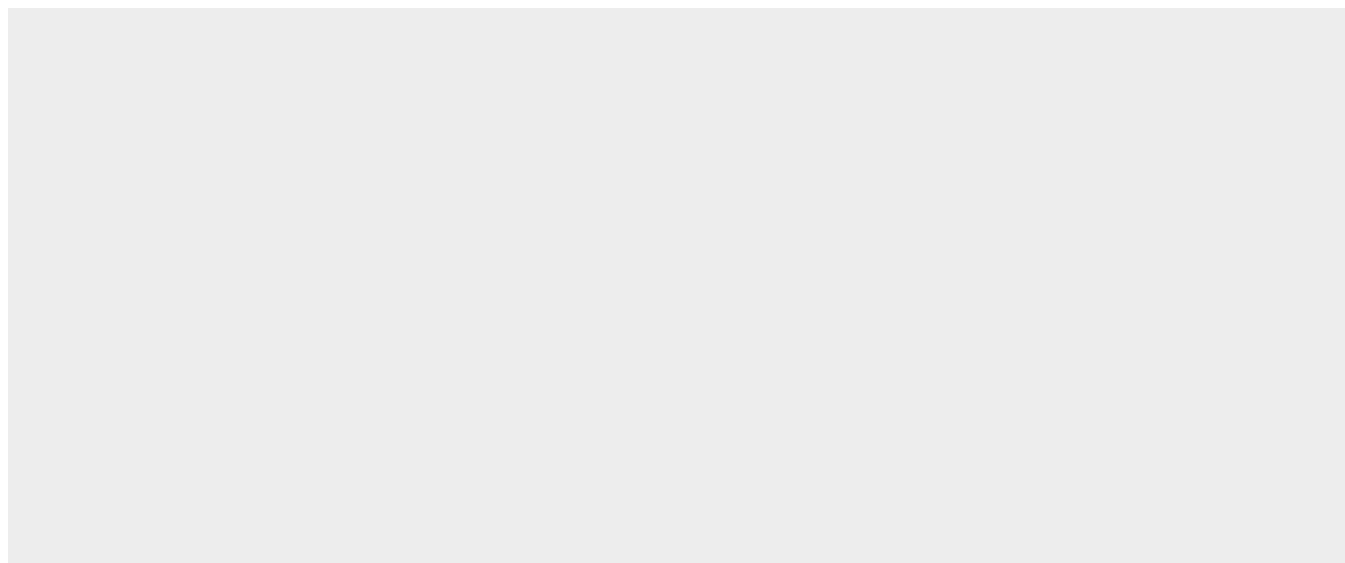
Detected in brain, liver, small intestine and testis, and at lower levels in heart, prostate, skeletal muscle and spleen. Detected in kidney proximal and distal tubules, endothelial cells lining the Bowman's capsules and some cysts. Detected at low levels in lung and pancreas (at protein level). Widely expressed

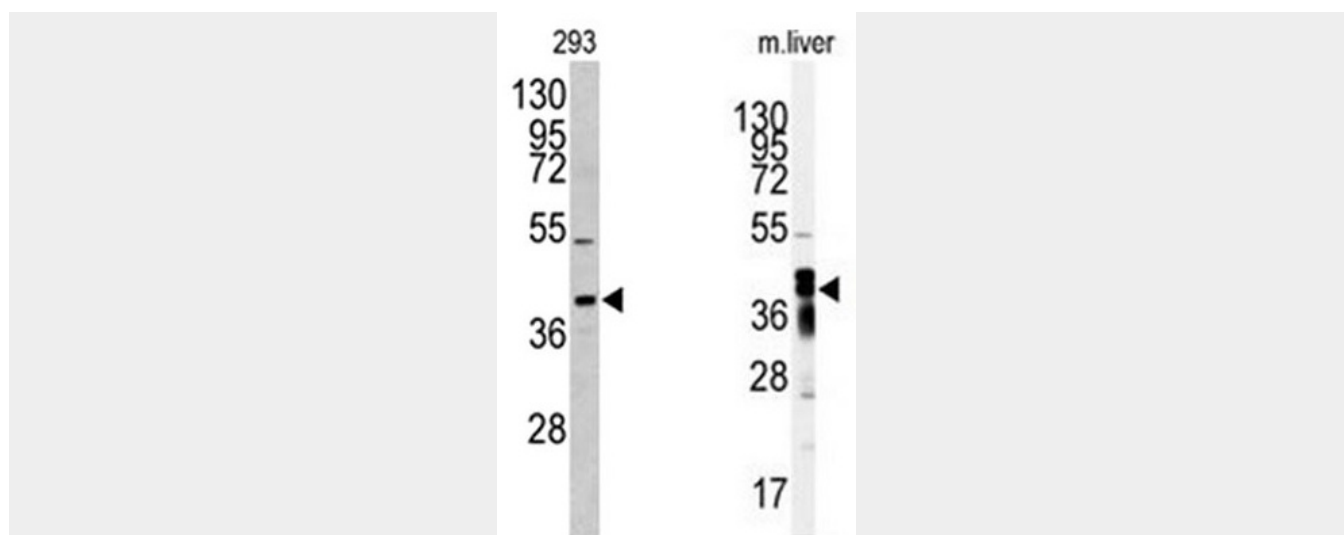
AKR7A2 Antibody (NT) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

AKR7A2 Antibody (NT) - Images





AKR7A2 Antibody western blot analysis in 293 cell line lysates and mouse liver tissue lysates (35 µg/lane).

AKR7A2 Antibody (NT) - Background

The aldo-keto reductase 7 (AKR7) family includes AKR7A2, AKR7A3 and AKR7A4 in human, AKR7A5 in mouse and AKR7A2 in rat, all of which function in the metabolism of aflatoxin B(1) and other dicarbonyl-containing compounds. More specifically, AKR7A proteins are involved in the metabolism of compounds with ketone groups on adjacent carbon atoms in a broad range of tissues, notably the liver. The human AKR7A2 gene maps to human chromosome 1p35-36, a region frequently deleted in sporadic colorectal cancer. The functional significance of this correlation lies in the constitutive expression of AKR7A2 in human liver to eliminate aflatoxin (an environmental carcinogen), thus acting as an endogenous chemo-preventative agent.