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# AKR7A2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7186a

## Product Information

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| **Application** | WB, E |
| **Primary Accession** | O43488 |
| **Other Accession** | Q8NHP1, Q8CG45 |
| **Reactivity** | Human, Mouse |
| **Predicted** | Rat, Bovine, Rabbit, Chicken |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB17972 |
| **Calculated MW** | 39589 |
| **Antigen Region** | 101-129 |

## Additional Information

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| **Gene ID** | 8574 |
| **Other Names** | Aflatoxin B1 aldehyde reductase member 2, 111n11, AFB1 aldehyde reductase 1, AFB1-AR 1, Aldoketoreductase 7, Succinic semialdehyde reductase, SSA reductase, AKR7A2, AFAR, AFAR1, AKR7 |
| **Target/Specificity** | This AKR7A2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 101-129 amino acids from the N-terminal region of human AKR7A2. |
| **Dilution** | WB~~1:1000 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS. |
| **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** | AKR7A2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | AKR7A2 |
| **Synonyms** | AFAR, AFAR1, AKR7 |

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| **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 |

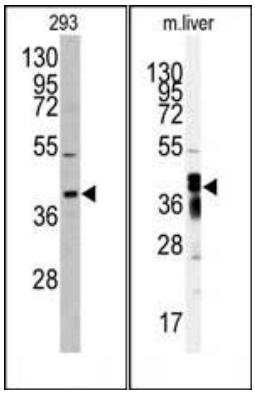
## Background

AKR7A2 is aldo-keto reductases, which are involved in the detoxification of aldehydes and ketones.

## References

Ireland L.S., Harrison D.J.Biochem. J. 332:21-34(1998)
Kelly V.P., Sherratt P.J.Biochem. J. 366:847-861(2002)

## Images




Western blot analysis of anti-AKR7A2 antibody (N-term) (Cat. #AP7186a) in 293 cell line lysates (35ug/lane). AKR7A2 (arrow) was detected using the purified Pab.
Western blot analysis of anti-AKR7A2 Antibody (N-term) (Cat. #AP7186a) in mouse liver tissue lysates (35ug/lane). AKR7A2 (arrow) was detected using the purified Pab .

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.