

**AKR7A2 Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP7186a****Specification**

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**AKR7A2 Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [O43488](#)**AKR7A2 Antibody (N-term) Blocking Peptide - Additional Information****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**

The synthetic peptide sequence used to generate the antibody [AP7186a](/products/AP7186a) was selected from the N-term region of human AKR7A2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**AKR7A2 Antibody (N-term) Blocking Peptide - 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 (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**AKR7A2 Antibody (N-term) Blocking Peptide - Images****AKR7A2 Antibody (N-term) Blocking Peptide - Background**

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

**AKR7A2 Antibody (N-term) Blocking Peptide - 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)