

Rabbit AKR7A2 Polyclonal Antibody | anti-AKR7A2 antibody

AKR7A2 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326134	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

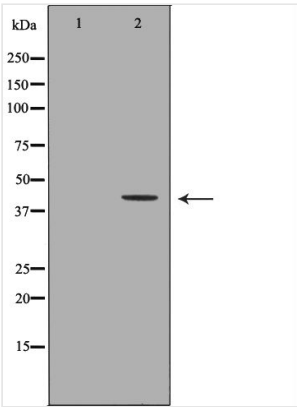
PRODUCT SYNONYMS

AKR7A2; Polyclonal Antibody; AKR7A2 Antibody; AFAR; AFAR1; AFB1 aldehyde reductase 1; AFB1 AR1; AFB1-AR 1; AFB1AR1; Aflatoxin aldehyde reductase; Aflatoxin B1 aldehyde reductase member 2; Aflatoxin beta1 aldehyde reductase; Aiar; AKR7; Ak7a2; Aldo keto reductase family 7; Aldo keto reductase family 7 member A2 aflatoxin aldehyde reductase; Aldo keto reductase family 7 member A2; member A2 (aflatoxin aldehyde reductase); Aldoketoreductase 7; ARK72_HUMAN; SSA reductase; Succinic semialdehyde reductase; anti-AKR7A2 antibody

PRODUCT SPECIFICATIONS

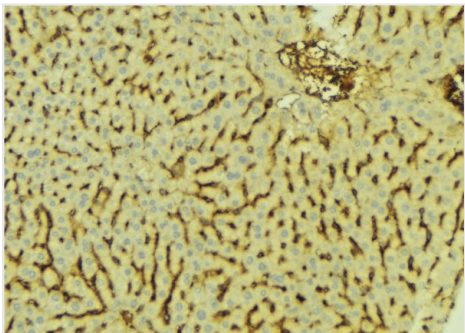
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	AKR7A2 antibody detects endogenous levels of total AKR7A2
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	359
Applicable Applications for anti-AKR7A2 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human AKR7A2
Subcellular Location	Golgi Apparatus. Cytoplasm.
Tissue Specificity	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.
Predicted Cross Reactivity	Pig, Bovine, Dog
Similarity	Pig (83%), Bovine (92%), Dog (92%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)

Western blot analysis of HepG2 lysate using AKR7A2 antibody. The lane on the left is treated with the antigen-specific peptide.



IHC (Immunohistochemistry)

AAA326134 at 1/100 staining Mouse liver tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-AKR7A2 antibody

Description: The protein encoded by this gene belongs to the aldo/keto reductase (AKR) superfamily and AKR7 family, which are involved in the detoxification of aldehydes and ketones. The AKR7 family consists of 3 genes that are present in a cluster on the p arm of chromosome 1. This protein, thought to be localized in the golgi, catalyzes the NADPH-dependent reduction of succinic semialdehyde to the endogenous neuromodulator, gamma-hydroxybutyrate. It may also function as a detoxication enzyme in the reduction of aflatoxin B1 and 2-carboxybenzaldehyde. [provided by RefSeq, Oct 2011]

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.

Subunit Structure: Homodimer.

Similarity: Belongs to the aldo/keto reductase family. Aldo/keto reductase 2 subfamily.

NCBI AND UNIPROT INFORMATION

NCBI GI #	41327764
NCBI GeneID	8574
NCBI Accession #	NP_003680.2
NCBI GenBank Nucleotide #	NM_003689.3
UniProt Accession #	O43488; O75749; Q5TG63
Molecular Weight	Observed: 40 kDa Predicted: 40 kDa
NCBI Official Full Name	aflatoxin B1 aldehyde reductase member 2 isoform 1
NCBI Official Synonym Full Names	aldo-keto reductase family 7 member A2
NCBI Official Symbol	AKR7A2
NCBI Official Synonym Symbols	AFAR; AKR7; AFAR1; AFB1-AR1
NCBI Protein Information	aflatoxin B1 aldehyde reductase member 2
UniProt Protein Name	Aflatoxin B1 aldehyde reductase member 2

UniProt Gene Name	AKR7A2
UniProt Synonym Gene Names	AFAR; AFAR1; AKR7; AFB1-AR 1; SSA reductase

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/akr7a2-antibody-immunohistochemistry-western-blot-elisa/326134>