

Rabbit AKR7A2 Polyclonal Antibody | anti-AKR7A2 antibody

Anti-AKR7A2 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19208	Rabbit	Human, Mouse, Rat	Western Blot, Immunohistochemistry, Flow Cytometry, Functional Assay, ELISA

PRODUCT SYNONYMS

AKR7A2; Polyclonal Antibody; Anti-AKR7A2 Antibody; Aflatoxin B1 aldehyde reductase member 2; AFB1 aldehyde reductase 1; AFB1-AR 1; Aldoketoreductase 7; Succinic semialdehyde reductase; SSA reductase; AFAR; AFAR1; AKR7; anti-AKR7A2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	No cross reactivity with other proteins.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Sequence Length	359
Applicable Applications for anti-AKR7A2 antibody	WB (Western Blot), IHC (Immunohistochemistry), FCM/FACS (Flow Cytometry), ELISA (Direct ELISA)
Application Notes	WB: 0.25-0.5ug/ml (Human, Mouse, Rat) IHC-P (Embedded Section): 0.5-1ug/ml (Human, Mouse, Rat) FC/FACS: 1-3ug/1x10 ⁶ cells (Human) Direct ELISA: 0.1-0.5ug/ml (Human) Tested Species: In-house tested species with positive results.
Immunogen	E Coli-derived human AKR7A2 recombinant protein (Position: A294-R359).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen store at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES

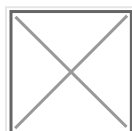
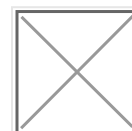
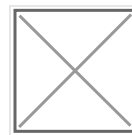

WB (Western Blot)

Figure 1. Western blot analysis of AKR7A2 using anti-AKR7A2 antibody.

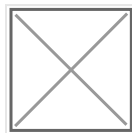

IHC (Immunohistochemistry)



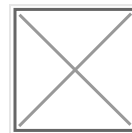
IHC (Immunohistochemistry)



IHC (Immunohistochemistry)



IHC (Immunohistochemistry)



FCM (Flow Cytometry)

ADDITIONAL INFORMATION

Related Product Information for anti-AKR7A2 antibody	Description: Rabbit IgG polyclonal antibody for AKR7A2 detection. Tested with WB, IHC-P, FCM, Direct ELISA in Human; Mouse; Rat. Background: Aflatoxin B1 aldehyde reductase member 2 is an enzyme that in humans is encoded by the AKR7A2 gene. It is mapped to 1p36.13. 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. Alternative splicing results in multiple transcript variants.
References	1. Ireland, L. S., Harrison, D. J., Neal, G. E., Hayes, J. D. Molecular cloning, expression and catalytic activity of a human AKR7 member of the aldo-keto reductase superfamily: evidence that the major 2-carboxybenzaldehyde reductase from human liver is a homologue of rat aflatoxin B(1)-aldehyde reductase. <i>Biochem. J.</i> 332: 21-34, 1998. 2. Kelly, V. P., Sherratt, P. J., Crouch, D. H., Hayes, J. D. Novel homodimeric and heterodimeric rat gamma-hydroxybutyrate synthases that associate with the Golgi apparatus define a distinct subclass of reductase 7 family proteins. <i>Biochem. J.</i> 366: 847-861, 2002. 3. Praml, C., Savelyeva, L., Schwab, M. Aflatoxin B1 aldehyde reductase (AFAR) genes cluster at 1p35-1p36.1 in a region frequently altered in human tumour cells. <i>Oncogene</i> 22: 4765-4773, 2003.

NCBI AND UNIPROT INFORMATION

NCBI GI #	38372871
NCBI GeneID	8574
UniProt Accession #	O43488
NCBI Official Full Name	Aflatoxin B1 aldehyde reductase member 2
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
UniProt Entry Name	ARK72_HUMAN

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.

