

Mouse AKR1A1 Monoclonal Antibody | anti-AKR1A1 antibody

AKR1A1 antibody

CATALOG #	HOST	APPLICATIONS
AAA106214	Mouse	Western Blot, Immunohistochemistry, Flow Cytometry, Functional Assay

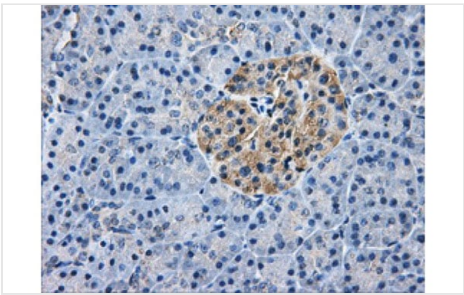
PRODUCT SYNONYMS

AKR1A1; Monoclonal Antibody; AKR1A1 antibody; Monoclonal AKR1A1; Anti-AKR1A1; ALDR1; ALR; ARM; DD3; Alcohol dehydrogenase [NADP+]; Alcohol dehydrogenase; Aldehyde reductase; aldo-keto reductase family 1 member A1; AKRA 1; AKRA-1; anti-AKR1A1 antibody

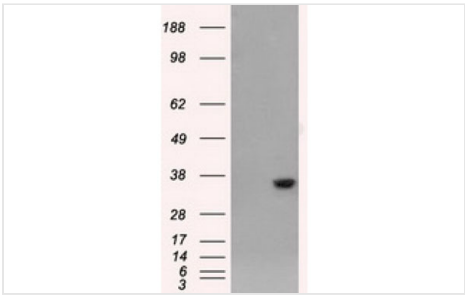
PRODUCT SPECIFICATIONS

Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Clone Number	4G2
Purity/Purification	AKR1A1 antibody was purified by affinity chromatography.
Form/Format	Supplied in PBS buffer, pH 7.3, containing 1% BSA, 50% glycerol and 0.02% sodium azide.
Concentration	500 ug-1 mg/ml (varies by lot)
Sequence Length	325
Applicable Applications for anti-AKR1A1 antibody	WB (Western Blot), IHC (Immunohistochemistry), FCM/FACS (Flow Cytometry)
Biological Significance	AKR1A1 is a member of the aldo/keto reductase superfamily and catalyzes the NADPH-dependent reduction of a variety of aromatic and aliphatic aldehydes to their corresponding alcohols. This protein is closely related (65% identity) to aldose reductase, an enzyme involved in the pathogenesis of some diabetic and galactosemic complications. It plays a role in the activation of procarcinogens, such as polycyclic aromatic hydrocarbon trans-dihydrodiols, and in the metabolism of various xenobiotics and drugs, including the anthracyclines doxorubicin (DOX) and daunorubicin (DAUN).
Cross-Reactivity	Human
Immunogen	AKR1A1 antibody was raised in mouse using a full length recombinant protein of human AKR1A1 (NP_006057) produced in HEK293T cells, as the immunogen.
Preparation and Storage	Store at 4 degree C for short term storage. Aliquot and store at -20 degree C for long term storage. Avoid repeated freeze/thaw cycles.

IMAGES



IHC (Immunohistochemistry)
Immunohistochemical analysis of AKR1A1 protein in paraffin embedded Human pancreas tissue using AKR1A1 antibody



WB (Western Blot)
Western Blot analysis of HEK293T cell lysates (5 ug) transfected with either recombinant AKR1A1 protein (Right) or empty vector (Left) detected with AKR1A1 antibody

ADDITIONAL INFORMATION

Related Product Information for anti-AKR1A1 antibody	Mouse monoclonal AKR1A1 antibody
Product Categories/Family for anti-AKR1A1 antibody	Proteases; Inhibitors; & Enzymes

NCBI AND UNIPROT INFORMATION

NCBI GI #	5174391
NCBI GeneID	10327
NCBI Accession #	NP_006057
NCBI GenBank Nucleotide #	NM_006066.3
UniProt Accession #	P14550; Q6IAZ4; A8KAL8; D3DQ04
Molecular Weight	36,573 Da
NCBI Official Full Name	alcohol dehydrogenase
NCBI Official Synonym Full Names	aldo-keto reductase family 1, member A1 (aldehyde reductase)
NCBI Official Symbol	AKR1A1
NCBI Official Synonym Symbols	ALR; ARM; DD3; ALDR1; HEL-S-6
NCBI Protein Information	alcohol dehydrogenase [NADP(+)]
UniProt Protein Name	Alcohol dehydrogenase [NADP(+)]
UniProt Gene Name	AKR1A1
UniProt Synonym Gene Names	ALDR1; ALR
UniProt Entry Name	AK1A1_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.