

Product Name: KD-Validated AKR1B1 Mouse Monoclonal Antibody**Catalog #: KVA00626**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Mouse
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Mouse mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 35.9kDa

Antigen Information

Gene Name	AKR1B1
Alternative Names	AKR1B1; Aldo-Keto Reductase Family 1 Member B; AR; Aldose Reductase; ALDR1; Aldo-Keto Reductase Family 1 Member B1; EC 1.1.1.21; ALR2; Aldo-Keto Reductase Family 1, Member B1 (Aldose Reductase); Lii5-2 CTCL Tumor Antigen; Low Km Aldose Reductase; Aldehyde Reductase 1; Aldehyde Reductase; EC 1.1.1.300; EC 1.1.1.372; EC 1.1.1.54; EC 1.1.1; ADR
Gene ID	231.0
SwissProt ID	P15121
Immunogen	Recombinant protein of human AKR1B1

Background

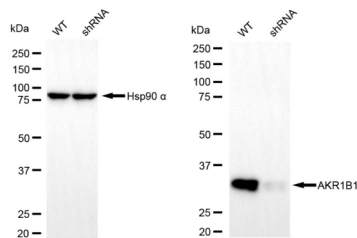
This gene encodes a member of the aldo/keto reductase superfamily, which consists of more than 40 known enzymes and

proteins. This member catalyzes the reduction of a number of aldehydes, including the aldehyde form of glucose, and is thereby implicated in the development of diabetic complications by catalyzing the reduction of glucose to sorbitol. Multiple pseudogenes have been identified for this gene. The nomenclature system used by the HUGO Gene Nomenclature Committee to define human ald-keto reductase family members is known to differ from that used by the Mouse Genome Informatics database. [provided by RefSeq, Feb 2009]

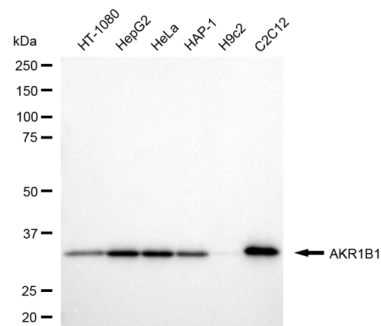
Research Area

Signal Transduction, Metabolism

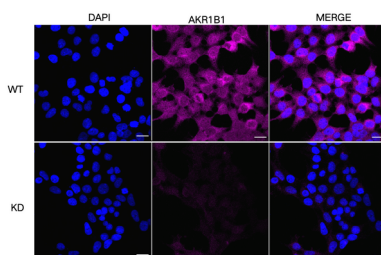
Image Data



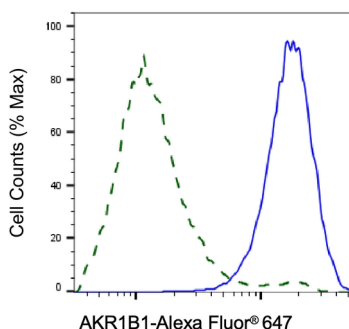
Western blotting analysis using AKR1B1 antibody (KVA00626). AKR1B1 expression in wild-type (WT) and AKR1B1 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with AKR1B1 antibody (KVA00626, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



Western blotting analysis using AKR1B1 antibody (KVA00626). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with AKR1B1 antibody (KVA00626, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



Immunocytochemical staining of HeLa cells using AKR1B1 antibody (KVA00626, 1:1,000). Top panel: wild-type (WT); Bottom panel: AKR1B1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; AKR1B1 was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm.



Validation of AKR1B1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with AKR1B1 antibody (KVA00626, 1:2,000) and analyzed using BD flow cytometer.

