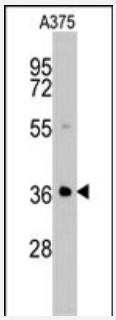
AKR1B1 polyclonal antibody

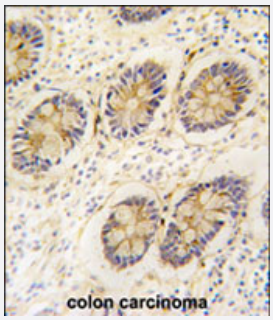
Catalog # PAB2581 Size 400 uL

Applications



Western Blot (Cell lysate)

Western blot analysis of AKR1B1 polyclonal antibody (Cat # PAB2581) in A-375 cell line lysates (35 ug/lane).AKR1B1 (arrow) was detected using the purified polyclonal antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Formalin-fixed and paraffin-embedded human colon carcinoma tissue reacted with AKR1B1 polyclonal antibody (Cat # PAB2581) , which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry ; clinical relevance has not been evaluated.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of AKR1B1.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to C-terminus of human AKR1B1.
Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Ammonium sulfate precipitation

Recommend Usage	Western Blot (1:1000) Immunohistochemistry (1:10-50) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

  Western blot analysis of AKR1B1 polyclonal antibody (Cat # PAB2581) in A-375 cell line lysates (35 ug/lane).AKR1B1 (arrow) was detected using the purified polyclonal antibody.

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

  Formalin-fixed and paraffin-embedded human colon carcinoma tissue reacted with AKR1B1 polyclonal antibody (Cat # PAB2581) , which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry ; clinical relevance has not been evaluated.

Gene Info — AKR1B1

Entrez GeneID	231
Protein Accession#	NP_001619;P15121
Gene Name	AKR1B1
Gene Alias	ADR, ALDR1, ALR2, AR, MGC1804
Gene Description	aldo-keto reductase family 1, member B1 (aldose reductase)
Omim ID	103880
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a member of the aldo/keto reductase superfamily, which consists of more tha n 40 known enzymes and proteins. This member catalyzes the reduction of a number of aldehyde s, including the aldehyde form of glucose, and is thereby implicated in the development of diabeti c complications by catalyzing the reduction of glucose to sorbitol. Multiple pseudogenes have bee n identified for this gene. The nomenclature system used by the HUGO Gene Nomenclature Com mittee to define human aldo-keto reductase family members is known to differ from that used by t he Mouse Genome Informatics database. [provided by RefSeq

Other Designations	Lii5-2 CTCL tumor antigen|aldehyde reductase 1|aldo-keto reductase family 1, member B1|aldose reductase|low Km aldose reductase

Publication Reference

- Identification of multiple and distinct defects in prostaglandin biosynthetic pathways in eutopic and ectopic endometrium of women with endometriosis.

  Rakhila H, Carli C, Daris M, Lemyre M, Leboeuf M, Akoum A.

  Fertility and Sterility 2013 Dec; 100(6):1650.

  Application: IHC-P, Human, Endometrium

- Upregulation of aldose reductase during foam cell formation as possible link among diabetes, hyperlipidemia, and atherosclerosis.

  Gleissner CA, Sanders JM, Nadler J, Ley K.

  Arteriosclerosis, Thrombosis, and Vascular Biology 2008 May; 28(6):1137.

- Merging the binding sites of aldose and aldehyde reductase for detection of inhibitor selectivity-determining features.

  Steuber H, Heine A, Podjarny A, Klebe G.

  Journal of Molecular Biology 2008 Apr; 379(5):991.

- Cloning and prokaryotic expression of a biologically active human placental aldose reductase.

  Grundmann U, Bohn H, Obermeier R, Amann E.

  DNA and Cell Biology 1990 Apr; 9(3):149.

Pathway

- Fructose and mannose metabolism
- Galactose metabolism
- Glycerolipid metabolism
- Metabolic pathways
- Pentose and glucuronate interconversions
- Pyruvate metabolism

Disease

- Albuminuria
- Cardiovascular Diseases
- Coronary Disease
- Diabetes Complications
- Diabetes Mellitus
- Diabetic Angiopathies
- Diabetic Nephropathies
- Diabetic Neuropathies
- Diabetic Retinopathy
- Disease Progression
- Edema
- Genetic Predisposition to Disease
- Glomerulonephritis
- Hypospadias
- Kidney Failure
- Renal Insufficiency