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Datasheet for ABIN7317592 **AKR1B1 Protein (His tag)**

Overview

Quantity:	100 µg
Target:	AKR1B1
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This AKR1B1 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human AKR1B1 Protein (His Tag)
Sequence:	Met 1-Phe 316
Characteristics:	A DNA sequence encoding the human AKR1B1 (P15121) (Met 1-Phe 316) was expressed, with a polyhistidine tag at the N-terminus.
Purity:	> 90 % as determined by reducing SDS-PAGE.

Target Details

Target:	AKR1B1
Alternative Name:	AKR1B1 (AKR1B1 Products)
Background:	Background: Aldose reductase (AKR1B1) belongs to the aldo/keto reductase superfamily. AKR1B1 is a NADPH-dependent aldo-keto reductase best known as the rate-limiting enzyme of the polyol pathway. Expression of AKR1B1 was the highest in lens and retina. It is the first enzyme in the polyol pathway through which glucose is converted to sorbitol which is important

Target Details

for the function of various organs in the body, and has been implicated in the etiology of diabetic complications. AKR1B1 is quite abundant in the collecting tubule cells and thought to provide protection against hypertonic environment. Some human tissues contain AKR1B1 as well as AKR1B10, a closely related member of the aldo-keto reductase superfamily.

Synonym: ADR;ALDR1;ALR2;AR;MGC1804

Molecular Weight: 37.9 kDa

UniProt: [P15121](#)

Pathways: [Metabolism of Steroid Hormones and Vitamin D](#), [C21-Steroid Hormone Metabolic Process](#), [Monocarboxylic Acid Catabolic Process](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile PBS, 20 % glycerol, pH 7.5

Storage: 4 °C,-20 °C,-80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.