Datasheet for ABIN7317529

AKR1A1 Protein (His tag)

Go to Product page

Overview

Quantity:	100 µg
Target:	AKR1A1
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This AKR1A1 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human AKR1A1 Protein (His Tag)
Sequence:	Met 1-Tyr 325
Characteristics:	A DNA sequence encoding the human AKR1A1 (P14550) (Met 1-Tyr 325) was expressed, with a polyhistidine tag at the N-terminus.
Purity:	> 90 % as determined by reducing SDS-PAGE.

Target Details

Target:	AKR1A1
Alternative Name:	AKR1A1 (AKR1A1 Products)
Background:	Background: Aldehyde reductase (AKR1A1) is a member of the aldo-keto reductase superfamily, which consists of more than 40 known enzymes and proteins that includes variety of monomeric NADPH-dependent oxidoreductases, such as aldehyde reductase. Aldehyde reductase has wide substrate specificities for carbonyl compounds. These enzymes are

Target Details

	implicated in the development of diabetic complications by catalyzing the reduction of glucose to sorbitol. Aldehyde reductase possess a structure with a beta-alpha-beta fold which contains a novel NADP-binding motif. The binding site is located in a large, deep, elliptical pocket in the C-terminal end of the beta sheet, the substrate being bound in an extended conformation. This binding is more similar to FAD- than to NAD(P)-binding oxidoreductases. AKR1A1 is involved in the reduction of biogenic and xenobiotic aldehydes and is present in virtually every tissue. Synonym: ALDR1,ALR,ARM,DD3,HEL-S-6
Molecular Weight:	39 kDa
UniProt:	P14550
Pathways:	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, 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.