Datasheet for ABIN935035

AKR1B10 Protein (AA 1-316)

1 Image

Go to Product page

Overview

Quantity:	100 µg
Target:	AKR1B10
Protein Characteristics:	AA 1-316
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active
Application:	SDS-PAGE (SDS)

Product Details

Sequence:	MATFVELSTK AKMPIVGLGT WKSPLGKVKE AVKVAIDAGY RHIDCAYVYQ NEHEVGEAIQ EKIQEKAVKR EDLFIVSKLW PTFFERPLVR KAFEKTLKDL KLSYLDVYLI HWPQGFKSGD DLFPKDDKGN AIGGKATFLD AWEAMEELVD EGLVKALGVS NFSHFQIEKL LNKPGLKYKP VTNQVECHPY LTQEKLIQYC HSKGITVTAY SPLGSPDRPW AKPEDPSLLE DPKIKEIAAK HKKTAAQVLI RFHIQRNVIV IPKSVTPARI VENIQVFDFK LSDEEMATIL SFNRNWRACN VLQSSHLEDY PFDAEY
Characteristics:	Purified recombinant Human AKR1 B10 protein Expression System: E.coli Bioactivity: Specific activity: approximately 0.32 - 0.4 units/mg. Enzymatic activity was confirmed by measuring the amount of enzyme catalyzing the oxidation of 1 uM NADPH per minute at 25 °C. Specific activity was expressed as units/mg protein. Molecular weight on SDS-PAGE will appear higher.

Product Details

Purity:	> 95 % pure

Target Details

Target:	AKR1B10
Alternative Name:	AKR1B10 (AKR1B10 Products)
Background:	AKR1B10, also known as Aldo-keto reductase family 1, member B10, AKR1B10 is a monomeric protein that efficiently catalyzes the reduction of aromatic and aliphatic aldehydes and ketones. AKR1B10 is ubiquitously expressed in many human tissues but is highly expressed in small intestine, colon and adrenal gland. This protein is pathogenically involved in diabetic complications and has been reported that AKR1B10 is overexpressed in human tumors, such as liver, breast, and lung cancer, and may play a critical role in the development and progression of cancer. Recombinant human AKR1B10 protein was expressed in E. coli and purified by using conventional chromatography. Alternative Names: AKRB0 1, AKR1B12 protein, member B10 protein, AKRB0-1 protein, AKR1B10 protein, HIS protein, SI reductase protein, HIS protein, Aldose reductase related protein protein, AKR1B10, AKRB0-1, ARL1 protein, Aldo-keto reductase family 1 protein, Small intestine reductase., member B10 Aldose reductase like protein, ARL-1 protein, ALDRLn protein, AKRB0 1 protein, hARP protein, ARL 1 protein, AKR1B11 protein, Aldo-keto reductase family 1 protein
Molecular Weight:	36 kDa (316 AA)

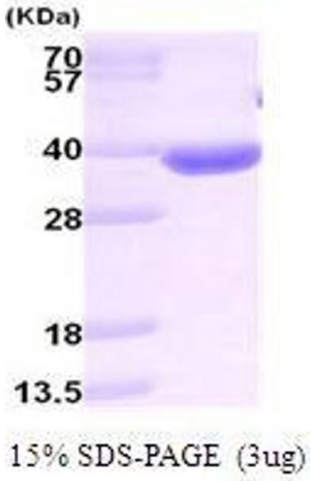
Application Details

Application Notes:	AKR1B10 protein has been used in SDS PAGE and may be suitable for use in other assays to be determined by the end user.
Assay Procedure:	1. Prepare a 1 mL reaction mix into a suitable container: The final concentrations are 0.1 M sodium phosphate (pH 7.0), 11 mM DL-glyceraldehyde, 0.1 mM NADPH. 2. Add 50 µL of recombinant AKR1B10 solution with various concentrations (2.5 µg, 5 µg, 15 µg) in 750 µL reaction buffer . 3. Mix by inversion and Incubate at 25 °C for 2.5 minutes. 4. Add 200 µL of 50 mM DL-glyceraldehyde as a substrate and immediately mix by inversion. 5. Record the increase at A340 nm for 3 minutes.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 mg/mL
Buffer:	Supplied as a liquid in 20 mM Tris-HCl buffer, pH 8.0, containing 10 % glycerol.
Handling Advice:	Avoid repeated freeze/thaw cycles.
Storage:	RT/-20 °C
Storage Comment:	Store at 4 °C for short term storage (1/2 weeks). Aliquot and store at -20 °C or - 70 °C for long term storage.

Images



SDS-PAGE

Image 1. Figure annotation denotes ug of protein loaded and % gel used.