

Aldose reductase Active Protein | AKR1B1 active protein

Aldo-keta reductase family 1, member B1

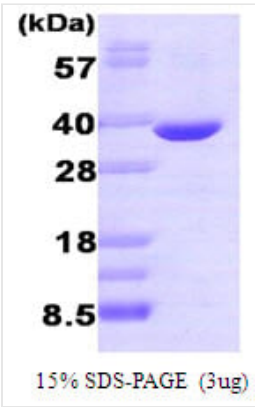
CATALOG # AAA11762	HOST E Coli	APPLICATIONS SDS-Page
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PRODUCT SYNONYMS

Aldose reductase; Aldo-keta reductase family 1; member B1; Aldo-keto reductase family1 member B1; AKR1B1; ADR; ALDR1; ALR2; AR; Aldo-keto reductase family1; member B1 AKR1B 1; Aldehyde reductase; aldehyde reductase 1; aldo-keto reductase family 1; member B1 aldr 1; aldr-1; Lii5-2 CTCL tumor antigen; low Km aldose reductase.; AKR1B1 active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	> 95% by SDS-PAGE
Form/Format	Liquid. In 20 mM Tris-HCl Buffer (pH 8.0) containing 1mM DTT, 10% glycerol
Concentration	1 mg/ml (determined by Bradford assay) (varies by lot)
Sequence	MASRLLLNNG AKMPILGLGT WKSPPGQVTE AVKVAIDVG Y RHIDCAHVYQ NENEVGVAIQ EKLREQVVKR EELFIVSKLW CTYHEKGLVK GACQKTLSDL KLDYLDLYLI HWPTGFKPGK EFFPLDESGN VVPSDTNILD TWAAMEELVD EGLVKAIGIS NFNHLQVEMI LNKPLGKYKP AVNQIECHPY LTQEKLQYC QSKGIVVTAY SPLGSPDRPW AKPEDPSLLE DPRIKAIKAA HNKTTAQVLI RFPMQRNLVV IPKSVTPERI AENFKVDFE LSSQDMTTLT SYNRNWRVCA LLCTSHKDY PFHEEF
Sequence Length	316
Applicable Applications for AKR1B1 active protein	SDS-PAGE
Antigen Species	Human
Endotoxin Level	< 1.0 EU per 1 microgram of protein (determined by LAL method)
Biological Activity	Specific activity is >800 pmol/min/ug, and is defined as the amount of enzyme that catalyze the reduction of 1.0 pmole DL-glyceraldehyde in the presence of NADPH per minute at pH7.0 at 37C.
Preparation and Storage	Can be stored at 4 degree C short term (1-2 weeks). For long term storage, aliquot and store at -20 degree C or -70 degree C. Avoid repeated freezing and thawing cycles.



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for AKR1B1 active protein	Aldose reductase (AKR1B1) is a member of the aldo-keto reductase (AKR) superfamily and catalyzes the NADPH-dependent reduction of a wide variety of carbonyl-containing compounds to their corresponding alcohols. This protein is implicated in the development of diabetic complications by catalyzing the reduction of glucose to sorbitol. Recombinant Aldose reductase (AKR1B) protein was expressed in E Coli and purified by using conventional chromatography techniques.
Product Categories/Family for AKR1B1 active protein	Redox Proteins
References	Ruiz FX., et al: (2009) Chem Biol Interact.178 (1-3); Donaghue KC., et al: Diabet Med. 22 (10):1315-20;

NCBI AND UNIPROT INFORMATION

NCBI GI #	4502049
NCBI GeneID	231
NCBI Accession #	NP_001619
NCBI GenBank Nucleotide #	NM_001628.3
UniProt Accession #	P15121; Q5U031; Q6FGA4; Q6ICP2; Q9BS21; Q9UCI9; B2R8N3
Molecular Weight	35.8kDa (316aa), confirmed by MALDI-TOF.
NCBI Official Full Name	aldose reductase isoform 1
NCBI Official Synonym Full Names	aldo-keto reductase family 1 member B
NCBI Official Symbol	AKR1B1
NCBI Official Synonym Symbols	AR; ADR; ALR2; ALDR1
NCBI Protein Information	aldose reductase
UniProt Protein Name	Aldose reductase
UniProt Gene Name	AKR1B1
UniProt Synonym Gene Names	ALDR1; AR

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.