

Recombinant Human AKR7A2, His-tagged

Cat. No. AKR7A2-26147TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full length Human AKR7A2 fused to His tag at N-terminus; amino acids 1-359 , MWt 44kDa.
Species	Human
Source	E.coli
ProteinLength	1-359 a.a.
Description	The protein encoded by this gene belongs to the aldo/keto reductase (AKR) superfamily and AKR7 family, which are involved in the detoxification of aldehydes and ketones. The AKR7 family consists of 3 genes that are present in a cluster on the p arm of chromosome 1. This protein, thought to be localized in the golgi, catalyzes the NADPH-dependent reduction of succinic semialdehyde to the endogenous neuromodulator, gamma-hydroxybutyrate. It may also function as a detoxication enzyme in the reduction of aflatoxin B1 and 2-carboxybenzaldehyde.
Conjugation	HIS
Tissue specificity	Detected in brain, liver, small intestine and testis, and at lower levels in heart, prostate, skeletal muscle and spleen. Detected in kidney proximal and distal tubules, endothelial cells lining the Bowmans capsules and some cysts. Detected at low levels
Form	Liquid

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Purity	>90% by SDS-PAGE
Storage buffer	Preservative: None Constituents: 20% Glycerol, 20mM Tris HCl, 1mM DTT, pH 8.0
Storage	Store at +4°C short term (1-2 weeks). Aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Sequences of amino acids	MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWGSELEM LSAASRVVSR AAVHCALRSP PPEARALAMS RPPPPRVASV LGTMEMGRRM DAPASAAVR AFLERGHTEL DTAFMYSDGQ SETILGGLGL GLGGGDCRVK IATKANPWDG KSLKPDsvRS QLETSKRLQ CPQVDFYLH APDHGTPVEE TLHACQRLHQ EGKFVELGLS NYASWEVAEI CTLCKSNGWI LPTVYQGMYN ATTRQVETEL FPCLRHFGLR FYAYNPLAGG LLTGKYKYED KDGKQPVGFR FGNSWAETYR NRFWKEHHFE AIALVEKALQ AAYGASAPSV TSAALRWMYH HSQLQGAHGD AVILGMSSLE QLEQNLAATE EGGLEPAVVD AFNQAWHLVA HECPNYFR
Sequence Similarities	Belongs to the aldo/keto reductase 2 family.
Full Length	Full L.
GENE INFORMATION	
Gene Name	AKR7A2 aldo-keto reductase family 7, member A2 (aflatoxin aldehyde reductase) [Homo sapiens]
Official Symbol	AKR7A2
Synonyms	AKR7A2; aldo-keto reductase family 7, member A2 (aflatoxin aldehyde reductase); aflatoxin B1 aldehyde reductase member 2; AFAR;

Gene ID	8574
mRNA Refseq	NM_003689
Protein Refseq	NP_003680
MIM	603418
Uniprot ID	O43488
Chromosome Location	1p36.13
Pathway	Metabolism of xenobiotics by cytochrome P450, organism-specific biosystem; Metabolism of xenobiotics by cytochrome P450, conserved biosystem;
Function	alditol:NADP+ 1-oxidoreductase activity; electron carrier activity; oxidoreductase activity; oxidoreductase activity, acting on the CH-OH group of donors, NAD or NADP as acceptor;

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