

Product datasheet for **AR39046PU-N**

AKR1C4 (1-323, His-tag) Human Protein

Product data:

Product Type:	Recombinant Proteins
Description:	AKR1C4 (1-323, His-tag) human recombinant protein, 0.1 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	<u>MGSSHHHHHH SSGLVPRGSH</u> MDPKYQRVEL NDGHFMPVLG FGTYAPPEVP RNRAVEVTKL AIEAGFRHID SAYLYNNEEQ VGLAIRSKIA DGSVKREDIF YTSKLWCTFF QPQMVPQPALE SSLKKLQLDY VDLYLLHFPM ALKPGETPLP KDENGKVIFD TVDLSATWEV MEKCKDAGLA KSIGVSNFNC RQLEMILNKP GLKYKPCNQ VECHPYLNQS KLLDFCKSKD IVLVAHSALG TQRHKLWVDP NSPVLLEDPV LCALAKKHKR TPALIALRYQ LQRGVVWLAK SYNEQRIREN IQVFEFQLTS EDMKVL DGLN RNYRYVWMDF LMDHPDYPFS DEY
Tag:	His-tag
Predicted MW:	39.2 kDa
Concentration:	lot specific
Purity:	>90%
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 20% glycerol, 0.1M NaCl, 1 mM DTT
Bioactivity:	Specific: Approximately > 0.6 units/mg protein. Enzymatic activity was confirmed by measuring the amount of enzyme catalyzing the oxidation of 1 micromole NADPH per minute at 25°C.
Preparation:	Liquid purified protein
Applications:	Protocol: Activity Assay 1. Prepare a 1 ml reaction mix into a suitable container: The final concentrations are 0.1M sodium phosphate (pH 7.0), 10mM DL-glyceraldehyde, 0.3mM NADPH. 2. Add 50ul of recombinant AKR1C4 solution with various concentrations (1ug, 2ug) in 750ul reaction buffer. 3. Mix by inversion and incubate at 25°C for 2.5 minutes. 4. Add 200ul of 50 mM DL-glyceraldehyde as a substrate and immediately mix by inversion. 5. Record the increase at A340nm for 3 minutes.



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Protein Description:	Recombinant human AKR1C4 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography.
Storage:	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	NP_001809
Locus ID:	1109
UniProt ID:	P17516
Cytogenetics:	10p15.1
Synonyms:	3-alpha-HSD; C11; CDR; CHDR; DD-4; DD4; HAKRA
Summary:	This gene encodes a member of the aldo/keto reductase superfamily, which consists of more than 40 known enzymes and proteins. These enzymes catalyze the conversion of aldehydes and ketones to their corresponding alcohols by utilizing NADH and/or NADPH as cofactors. The enzymes display overlapping but distinct substrate specificity. This enzyme catalyzes the bioreduction of chlordecone, a toxic organochlorine pesticide, to chlordecone alcohol in liver. This gene shares high sequence identity with three other gene members and is clustered with those three genes at chromosome 10p15-p14. [provided by RefSeq, Jul 2008]
Protein Families:	Druggable Genome
Protein Pathways:	Androgen and estrogen metabolism, C21-Steroid hormone metabolism, Metabolic pathways, Metabolism of xenobiotics by cytochrome P450, Primary bile acid biosynthesis

Product images:

