Data Sheet (Cat.No.TMPY-03497)

TargetMol

AKR1C2 Protein, Human, Recombinant (His)

General Information

Synonyms:	AKR1C2;HBAB;SRXY8;AKR1C-pseudo;aldo-keto reductase family 1, member C2;DDH2;DD2;BABP;HAKRD;DD-2;DD/BABP;TDD;MCDR2;DD
Protein Construction:	A DNA sequence encoding the mature form of human AKR1C2 (P52895-1) (Met1-Tyr323) was expressed with a polyhistidine tag at the N-terminus. Predicted N terminal: His
Species:	Human
Expression Host:	E. coli
Accession:	P52895-1
Molecular Weight:	38.6 kDa (predicted); 37 kDa (reducing conditions)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 90 % as determined by SDS-PAGE
Endotoxin:	Please contact us for more information.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Shipping:

In general, Lyophilized powders are shipping with blue ice.

Protein Background

AKR1C2 is a member of the aldo/keto reductase superfamily, which consists of more than 4 known enzymes and proteins. These enzymes catalyze the conversion of aldehydes and ketones to their corresponding alcohols using NADH and/or NADPH as cofactors. The enzymes display overlapping but distinct substrate specificity. This enzyme binds bile acid with high affinity, and shows minimal 3-alpha-hydroxysteroid dehydrogenase activity. AKR1C2 gene shares high sequence identity with three other gene members and is clustered with those three genes at

chromosome 1p15-p14. Three transcript variants encoding two different isoforms have been found for AKR1C2 gene.

Reference

Jin Y. et al., 2011, Biochem J. 437 (1): 53-61.
Veilleux A. et al., 2012, Am J Physiol Endocrinol Metab. 302 (8): E941-9.
Kuang P. et al., 2012, Lung Cancer. 77 (2): 427-32.

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