Data Sheet (Cat.No.TMPJ-00962)

TargetMol

AKR1C3 Protein, Human, Recombinant (His)

General Information

Synonyms:	3-Alpha-HSD Type 2;17-β-Hydroxysteroid Dehydrogenase Type 5;Chlordecone Reductase Homolog HAKRb;Dihydrodiol Dehydrogenase;17-Beta-Hydroxysteroid Dehydrogenase Type 5;17-Beta-HSD 5;17-β-HSD 5;3-α-HSD Type II Brain;Aldo-Keto Reductase Family 1 Member C3;3-α-Hydroxysteroid Dehydrogenase Type 2;3-Alpha-Hydroxysteroid Dehydrogenase Type 2;3-α-HSD Type 2;3-Alpha-HSD Type II Brain
Protein Construction:	Met1-Tyr323
Species:	Human
Expression Host:	HEK293 Cells
Accession:	P42330
Molecular Weight:	38 KDa (reducing condition)
AA Sequence:	Met1-Tyr323

QC Testing

Biological Activity:	Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	Greater than 95% as determined by reducing SDS-PAGE. (QC verified)
Endotoxin:	< 0.1 ng/μg (1 EU/μg) as determined by LAL test.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing 20 mM PB, 6% Sucrose, 2% Glycine, 100 mM NaCl, 0.05% Tween 80, pH 6.0.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

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.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

AKR1C3, is an enzyme which belongs to the aldo/keto reductase family. It is expressed in many tissues including

adrenal gland, brain, kidney, liver, lung, mammary gland, placenta, small intestine, colon, spleen, prostate and testis. AKR1C3 catalyzes the conversion of aldehydes and ketones to alcohols. It catalyzes the reduction of prostaglandin (PG) D2, PGH2 and phenanthrenequinone (PQ) and the oxidation of 9-alpha,11-beta-PGF2 to PGD2, which functions as a bi-directional 3-alpha-, 17-beta- and 20-alpha HSD. It can interconvert active androgens, estrogens and progestins with their cognate inactive metabolites.

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