

### 32-6653: AKR1C1 Human

<b>Application :</b>	Functional Assay
<b>Alternative Name :</b>	DDH1, DDH, HAKRC, 20-alpha-HSD, DD1/DD2, HBAB, C9, DD1, H-37, MBAB, MGC8954, 2-ALPHA-HSD, AKR1C1, Aldo-keto reductase family 1 member C1, 20-alpha-hydroxysteroid dehydrogenase, Trans-1,2-dihydrobenzene-1,2-diol dehydrogenase, Indanol dehydrogenase, Dihydrodiol dehydrogenase 1/2, Chlordecone reductase homolog HAKRC, High-affinity hepatic bile acid-binding protein

#### Description

Source: Escherichia Coli.

Sterile Filtered colorless solution.

Aldo-keto reductase family 1 member C1 or AKR1C1 is an enzyme, part of the aldo/keto reductase family that holds over 40 familiar proteins. AKR1C1 promotes the conversion of ketones & aldehydes to their alcohol forms by using cofactors such as NADH & NADPH. AKR1C1 promotes the progesterone reduction to its inactive molecule form 20-alpha-hydroxy-progesterone. AKR1C1 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 323 amino acids (1-323) and having a molecular mass of 36.7 kDa. AKR1C1 is purified by proprietary chromatographic techniques.

#### Product Info

<b>Amount :</b>	2 µg / 10 µg
<b>Purification :</b>	Greater than 95.0% as determined by SDS-PAGE.
<b>Content :</b>	The AKR1C1 solution (1mg/ml) contains 20% Glycerol, 0.1M NaCl and 20mM Tris-HCl buffer (pH 8.5).
<b>Storage condition :</b>	Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.
<b>Amino Acid :</b>	MDSKYQCVKL NDGHFMPVLG FGTYAPAEVP KSKALEATKL AIEAGFRHID SAHLYNNEEQ VGLAIRSKIA DGSVKREDIF YTSKLWCNSH RPELVPALE RSLKNLQLDY VDLYLIHFPV SVKPGEEVIP KDENGKILFD TVDLCATWEA VEKCKDAGLA KSIGVSNFNR RQLEMILNKP GLKYKPVCNQ VECHPYFNQR KLLDFCKSKD IVLVAYSALG SHREEPWVDP NSPVLLEDPVLCALAKKHKR TPALIALRYQ LQRGVVVLAK SYNEQRIRQN VQVFEFQLTS EEMKAIDGLN RNVRYLTLDI FAGPPNYPFS DEY

#### Application Note

Specific activity is > 500pmol/min/ug. It is defined by the amount of enzyme that catalyzes oxidation of 1.0pmole 1-Acenaphthenol in the presence of NADP per minute at pH 8.8 at 25Â°C.