

## 32-6655: AKR1C4 Human

<b>Application :</b>	Functional Assay
<b>Alternative Name :</b>	Aldo-keto reductase family 1 member C4 (chlordecone reductase 3-alpha hydroxysteroid dehydrogenase type I dihydrodiol dehydrogenase 4), 3-alpha-hydroxysteroid dehydrogenase type I, MGC22581, HAKRA, 3 alpha-hydroxysteroid dehydrogenase/dihydrodiol dehydrogenase 4, CDR, DD4, CHDR, 3-alpha-HSD1, C11.

### Description

Source: Escherichia Coli.

Sterile Filtered colorless solution.

Aldo-keto reductase family 1 member C4 or AKR1C4 is a part of the aldo/keto reductase superfamily that has more than 40 known proteins & enzymes. AKR1C4 catalyzes the conversion of aldehydes and ketones to their corresponding alcohols with NADH and/or NADPH as cofactors. AKR1C4 takes place in the bioreduction of chlordecone, a toxic organochlorine pesticide, to chlordecone alcohol in the liver tissue.

AKR1C4 Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 323 amino acids (1-323aa ) and having a molecular mass of 37kDa.

### Product Info

<b>Amount :</b>	2 µg / 10 µg
<b>Purification :</b>	Greater than 90.0% as determined by SDS-PAGE.
<b>Content :</b>	AKR1C4 protein solution (1mg/ml) containing 20mM Tris-HCl buffer (pH 8.5), 0.1M NaCl, 10% glycerol and 1mM DTT.
<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>	MDPKYQRVEL NDGHFMPVLG FGTYAPPEVP RNRAVEVTKL AIEAGFRHID SAYLYNNEEQ VGLAIRSKIA DGSVKREDIF YTSKLWCTFF QPQMVQPALE SSLKKLQLDY VDLYLLHFPM ALKPGETPLP KDENGKVIFD TVDLSATWEV MEKCKDAGLA KSIGVSNFNC RQLEMILNKP GLKYKPVCNQ VECHPYLNQS KLLDFCKSKD IVLVAHSALG TQRHKLWVDP NSPVLLEDPV LCALAKKHKR TPALIALRYQ LQRGVVVLAK SYNEQRIREN IQVFEFQLTS EDMKVLDGLN RNYRYVVMDF LMDHPDYPFS DEY.

### Application Note

Specific activity is > 700pmol/min/ug, and is defined as the amount of enzyme that catalyze the oxidation of 1.0pmole 1-Acenaphthenol in the presence of NADP per minute at pH 8.8 at 25C