

Recombinant Protein Technical Manual Recombinant Human AKR1C4 Protein (His Tag)

RPES2308

## Product Data:

Species: Human

**Size:** 10µg

Expression host: E. coli

Uniprot: P17516

## **Protein Information:**

Molecular Mass:	39.3 kDa
AP Molecular Mass:	26&38 kDa
Tag:	N-6His
Bio-activity:	
Purity:	> 90 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per $\mu g$ as determined by the LAL method.
Storage:	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping:	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at<-20°C.
Formulation:	Supplied as a 0.2 $\mu$ m filtered solution of 20mM TrisHCl, 150mM NaCl, pH 8.0.
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	Aldo-Keto Reductase Family 1 Member C4; 3-Alpha-HSD1; 3-Alpha-Hydroxysteroid Dehydrogenase Type I; Chlordecone Reductase; CDR; Dihydrodiol Dehydrogenase 4; DD-4; DD4; HAKRA; AKR1C4; CHDR

Sequence: Met 1-Tyr323

## Background:

Aldo-Keto Reductase 1C4/AKR1C4 is a member of the aldo/keto reductase family that consists of more than 40 known enzymes and proteins. AKR1C4 has highly expressed in Liver. It can catalyzes the bioreduction of chlordecone, a toxic organochlorine pesticide, to chlordecone alcohol in liver. AKR1C4 catalyzes the transformation of the potent androgen dihydrotestosterone (DHT) into the less active form, 5- $\alpha$ -Androstan-3- $\alpha$ ,17- $\beta$ -diol (3- $\alpha$ -diol). In addition, AKR1C4 also has some 20- $\alpha$ -Hydroxysteroid Dehydrogenase activity.