

## 32-6654: AKR1C3 Human

**Application :** Functional Assay  
**Alternative Name :** DD3, DDX, HAKRB, HAKRe, HA1753, HSD17B5, hluPGFS, KIAA0119, AKR1C3, Aldo-keto reductase family 1 member C3, 3-alpha-HSD type 2, 17-beta-HSD 5, PGFS, DD-3.

### Description

Source: Escherichia Coli.

Sterile Filtered colorless solution.

Aldo-keto reductase family 1 member C3 isoform 1 or AKR1C3 is an enzyme, part of the aldo-keto reductase family that promotes conversion of ketones & aldehydes to the alcohol forms while using cofactors such as NADPH & NADH. AKR1C3 promotes the reduction of PG molecule (prostaglandin), PQ (phenanthrenequinone) & PGH2. Another role is oxidation of 9 alpha, 11 beta-PGF2 to PGD2. AKR1C3 holds a crucial part in the pathogenesis of allergic diseases like asthma and can also take part in the regulation of cell growth and differentiation.

AKR1C3 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 36.8 kDa. AKR1C3 is purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 2 µg / 10 µg  
**Purification :** Greater than 90.0% as determined by SDS-PAGE.  
**Content :** The AKR1C3 solution (1mg/ml) contains 10% Glycerol, 0.1M NaCl, 1mM DTT and 20mM Tris-HCl buffer (pH 8.5).  
**Storage condition :** 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.  
**Amino Acid :** MDSKHQCVKL NDGHFMPVLG FGTYAPPEVP RSKALEVTKL AIEAGFRHID SAHLYNNEEQ VGLAIRSKIA DGSVKREDIF YTSKLVSTFH RPELVPALE NSLKKAQLDY VDLYLIHSPM SLKPGEELSP TDENGKVID IVDLCTTWEA MEKCKDAGLA KSIGVSNFNR RQLEMILNKP GLKYKPCVNCQ VECHPYFNRS KLLDFCKSKD IVLVAYSALG SQRDKRWVDP NSPVLLEDPVLCALAKKHKR TPALIALRYQ LQRGVVVLAK SYNEQRIRQN VQVFEFLTA EDMKAIDGLD RNLHYFNSDS FASHPNYPYS DEY

### Application Note

Specific activity is > 1,000pmol/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 25°C.