

# Product information

## AKR1D1, 1-326 aa

Human, His-tagged, Recombinant, *E.coli*

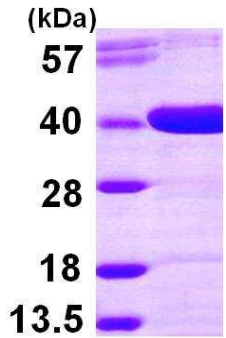
Cat. No. IBATGP0953

**Full name:** Aldo-keto reductase family 1, member D1

**NCBI Accession No.:** NP\_005980

**Synonyms:** 3o5bred, CBAS2, SRD5B1

**Description:** Aldo-keto reductase family 1, member D1, also known as AKR1D1, is a member of the AKR superfamily. The AKR family of proteins are soluble NADPH oxidoreductases. They play important roles in the metabolism of drugs, carcinogens and reactive aldehydes. AKR1D1 is responsible for the catalysis of the 5-beta-reduction of bile acid intermediates and steroid hormones which carry a delta (4)-3-one structure. AKR1D1 is highly expressed in liver, colon and testis. Deficiency of this enzyme may contribute to hepatic dysfunction. Recombinant human AKR1D1 protein, fused to His-tag at N-terminus, was expressed in *E.coli* and purified by using conventional chromatography techniques.

<p><b>Form:</b> Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 20% glycerol, 100mM NaCl</p> <p><b>Molecular Weight:</b> 39.5 kDa (346aa), confirmed by MALDI-TOF</p> <p><b>Purity:</b> &gt; 90% by SDS - PAGE</p> <p><b>Concentration:</b> 0.5 mg/ml (determined by Bradford assay)</p>	 <p>(kDa) 57 40 28 18 13.5</p> <p>15% SDS-PAGE (3ug)</p>
<p><b>Sequences of amino acids:</b></p> <p>MGSSHHHHH SSGLVPRGSH MDLSAASHRI PLSDGNSIPI IGLGTYSEPK STPKGACATS VKVAIDTGYR HIDGAYIYQN EHEVGEAIRE KIAEGKVRRE DIFYCGKLWA TNHVPemVRP TLERTLRVLQ LDYVDLYIIE VPMAFKPGDE IYPRDENGKW LYHKSNL CAT WEAMEACKDA GLVKS LGVSN FNRRQLELIL NKPGLKHKPV SNQVECHPYF TQPKLLKFCQ QHDIVITAYS PLGTSRNP IW VNVSSPPLLK DALLNSLGKR YNKTA AQIVL RFNIQRGVVV IPKSFNLERI KENFQIFDFS LTEEEMKDIE ALNKNVRFVE LLMWRDHPEY PFHDEY</p>	

### General references:

Charbonneau A., *et al.* (2001) *Biochim Biophys Acta.* 1517:228-235.

Lemond H A., *et al.* (2003) *Gut.* 52:1494-1499.

**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C.  
Avoid repeated freezing and thawing cycles.

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.