

**AR52019PU-S****Human AKR1D1 / SRD5B1 (1-326) - Purified****Alternate names:**

3-oxo-5-beta-steroid 4-dehydrogenase, Aldo-keto reductase family 1 member D1, Delta(4)-3-ketosteroid 5-beta-reductase, Delta(4)-3-oxosteroid 5-beta-reductase

**Quantity:**

50 µg

**Concentration:**

1.0 mg/ml (determined by absorbance at 280nm)

**Background:**

AKR1D1 also known as 3-oxo-5beta-steroid 4-dehydrogenase isoform 1, is a member of the AKR superfamily. The AKR family of proteins are soluble DPH 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 AKR1D1 protein was expressed in E.coli and purified by using conventional chromatography techniques.

**Uniprot ID:**

[P51857](#)

**NCBI:**

[NP\\_005980](#)

**Species:**

Human

**Source:**

E. coli

**Format:**

**State:** Liquid purified protein

**Purity:** >95% by SDS - PAGE

**Buffer System:** 20 mM Tris-HCl buffer (pH 8.5) containing 1mM DTT, 0.1M NaCl, 10% glycerol.

**Endotoxin Level:** < 1.0 EU per 1 microgram of protein (determined by LAL method)

**Description:****AA Sequence:**

MDLSAASHRI PLSDGNISPI IGLGTYSEPK STPKGACATS VKVAIDTGYR HIDGAYIYQN  
EHEVGEAIRE KIAEGKVRRE DIFYCGKLWA TNHVPDMVRP TLERTLRVLQ LDYVDLYIIE  
VPMFAFKPGDE IYPRDENGKW LYHKSNLKAT WEAMEACKDA GLVKSGLGVSF FNRRQLELIL  
NKPGLKHKPV SNQVECHPYF TQPKLLKFCQ QHDIVITAYS PLGTSRNPIW VNVSSPPLLK  
DALLNSLGKR YNKTAAQIVL RFNIQRGVVV IPKSFNLERI KENFQIFDFS LTEEEMKDIE  
ALNKNVRFVE LLMWRDHPEY PFHDEY

**Molecular weight:** 37.3 kDa (326aa)

**Storage:**

Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer.

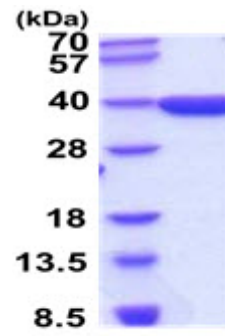
Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

**General Readings:**

Moore S A., et al. (1995) J Mol Biol. 249(1):195-214 Gould S J., et al. (1988) Anal Biochem. 175(1):5-13

Pictures:



15% SDS-PAGE (3ug)