
Product Data Sheet

Product Name: AKR1D1 Human

Cat. No.: GP21381

Batch No.: 1

Product Data

Purity >98%

Source Escherichia Coli.

Physical Appearance solid

Shipping Condition Shipped with Ice Packs.

Synonyms

3-oxo-5-beta-steroid 4-dehydrogenase; Aldo-Keto Reductase Family 1; Member D1; SRD5B1; Delta(4)-3-Ketosteroid 5-Beta-Reductase; Delta4-3-Ketosteroid-5-Beta-Reductase; Delta(4)-3-Oxosteroid 5-Beta-Reductase; CBAS2; Steroid-5-Beta-Reductase; Beta Polypeptide 1 (3-Oxo-5 Beta-Steroid Delta4-Dehydrogenase Beta 1); Aldo-Keto Reductase Family 1; Member D1 (Delta4-3-Ketosteroid-5-Beta-Reductase); Aldo-Keto Reductase Family 1 Member D1; 3-Oxo-5-Beta-Steroid4-Dehydrogenase; EC 1.3.1.3; 3o5bred.

Amino Acid Sequence

MDLSAASHRI PLSDGNSIPI IGLGTYSEPK STPKGACATS
 VKVAIDTGYRHIDGAYIYQN EHEVGEAIRE KIAEGKVRRE DIFYCGKLWA
 TNHVP EMVRP TLERTLRVLQ LDYVDLYIIEVPM AFKPGDE IYPRDENGKW
 LYHKS NL CAT WEAMEACKDA GLVKSLG VSN FNRRQLELILNK PGLKHKP V
 SNQVECHPYFTQP KLLKFCQ QHDIVITAYS PLGTSRNPIW VNVSSPPLLK
 DALLNSLGKR YNK TAAQIVL RFNIQRGVVV IPKSFNLERIKENFQIFDFS
 LTEEEMKDIE ALNKNVRFVE LLMWRDHPEY PFHDEY.

Formulation

The AKR1D1 protein solution (1mg/ml) contains 20mM Tris-HCl buffer (pH 8.5), 1mM DTT, 0.1M NaCl and 10% glycerol.

Introduction

Aldo-keto reductase family 1 member D1 (AKR1D1) belongs to the AKR superfamily. The AKR family proteins are soluble NADPH oxidoreductases, which have vital roles in the metabolism of drugs, carcinogens and reactive aldehydes. AKR1D1 is also responsible for the catalysis of the 5-beta-reduction of bile acid intermediates and steroid hormones that carry a delta (4)-3-1 structure. AKR1D1 is highly expressed in the liver, colon and testis. Deficiency of the AKR1D1 enzyme may contribute to hepatic dysfunction.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

Stability

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.

Background

AKR1D1 Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 326 amino acids (1-326 a.a.) and having a molecular mass of 37.3kDa. The AKR1D1 is purified by proprietary chromatographic techniques.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA