

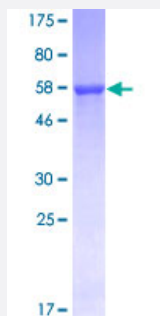
Full-Length

AKR1D1 (Human) Recombinant Protein (P01)

Catalog # H00006718-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human AKR1D1 full-length ORF (NP_005980.1, 1 a.a. - 326 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MDLSAASHRIPLSDGNSIPIGLGTYSEPKSTPKGACATSVKVAIDTGYRHIDGAYYQNEHEVGEAIR
EKIAEGKVRREDIFYCGKLWATNHVPEMVRPTLERTLRVLQLDYVDLYIIEVPMFAFKPGDEMYPRDE
NGKWLYHKSNLCATWEAMEACKDAGLVKSLGVSNNRRQLELILNKPGLKHKPVSNQVECHPYF
TQPKLLKFCQQHDMITAYSPLGTSRNPWVNVSSPPLLKDALLNSLGKRYNKTAAQVLRFNIRGV
VVIPKSFNLERIKENFQIFDFSLTEEMKDIEALNKNVRFVELLMWRDHPEYPFHDEY

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

63.8

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue.

Storage Buffer

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

Storage Instruction

Store at -80°C. Aliquot to avoid repeated freezing and thawing.

Note

Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — AKR1D1

Entrez GeneID	6718
GeneBank Accession#	NM_005989.2
Protein Accession#	NP_005980.1
Gene Name	AKR1D1
Gene Alias	3o5bred, SRD5B1
Gene Description	aldo-keto reductase family 1, member D1 (delta 4-3-ketosteroid-5-beta-reductase)
Omim ID	604741
Gene Ontology	Hyperlink
Gene Summary	The enzyme encoded by this gene is responsible for the catalysis of the 5-beta-reduction of bile acid intermediates and steroid hormones carrying a delta(4)-3-one structure. Deficiency of this enzyme may contribute to hepatic dysfunction. [provided by RefSeq]
Other Designations	aldo-keto reductase family 1, member D1 steroid 5-beta-reductase steroid-5-beta-reductase, beta polypeptide 1 (3-oxo-5 beta-steroid delta 4-dehydrogenase beta 1)

Publication Reference

- [In vitro metabolism of a novel JNK inhibitor tanzisertib: interspecies differences in oxido-reduction and characterization of enzymes involved in metabolism.](#)

Atsriku C, Hoffmann M, Moghaddam M, Kumar G, Surapaneni S.

Xenobiotica 2015 Jun; 45(6):465.

Application: Enzyme, Human, Tanzisertib were incubated in human liver microsomes, cytosol and hepatocytes

Pathway

- [Androgen and estrogen metabolism](#)
- [C21-Steroid hormone metabolism](#)
- [Metabolic pathways](#)
- [Primary bile acid biosynthesis](#)

Disease

- [Tobacco Use Disorder](#)