

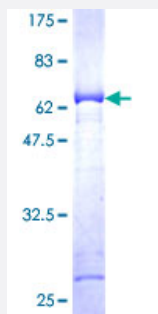
Full-Length

AKR1C3 (Human) Recombinant Protein (P01)

Catalog # H00008644-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human AKR1C3 full-length ORF (AAH01479, 1 a.a. - 323 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MDSKHQCVKLNDGHFMPVLGFGTYAPPEVPRSKALEVTCLAIEAGFRHIDSAHLYNNEEQVGLAI
RSKIADGSGVKREDIFYTSKLWSTFHRPELVRLPALENSLKKALDYVDLYLIHSPMSLKPGEELSPT
DENGKVIFDIVDLCTTWEAMEKCKDAGLAKSIGVSNFNRRQLEMILNKPLKYKPVCNQVECHPY
FNRSKLLDFCKSKDMLVAYSALGSQRDKRWDPNSPVLLEDPVLCALAKKHKRTPALIALRYQL
QRGVVVLAKSYNEQRIRQNVQVFEFQLTAEDMKAIDGLDRNLHYFNSDSFASHPNYPYSDEY

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

61.16

Interspecies Antigen Sequence

Mouse (73); Rat (71)

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 — AKR1C3

Entrez GeneID[8644](#)**GeneBank Accession#**[BC001479.1](#)**Protein Accession#**[AAH01479](#)**Gene Name**

AKR1C3

Gene Alias

DD3, DDX, HA1753, HAKRB, HAKRe, HSD17B5, KIAA0119, hluPGFS

Gene Description

aldo-keto reductase family 1, member C3 (3-alpha hydroxysteroid dehydrogenase, type II)

Omim ID[603966](#)**Gene Ontology**[Hyperlink](#)**Gene Summary**

This gene encodes a member of the aldo/keto reductase superfamily, which consists of more than 40 known enzymes and proteins. These enzymes catalyze the conversion of aldehydes and ketones to their corresponding alcohols by utilizing NADH and/or NADPH as cofactors. The enzymes display overlapping but distinct substrate specificity. This enzyme catalyzes the reduction of prostaglandin (PG) D₂, PGH₂ and phenanthrenequinone (PQ), and the oxidation of 9alpha,11beta-PGF₂ to PGD₂. It may play an important role in the pathogenesis of allergic diseases such as asthma, and may also have a role in controlling cell growth and/or differentiation. This gene shares high sequence identity with three other gene members and is clustered with those three genes at chromosome 10p15-p14. [provided by RefSeq]

Other Designations

OTTHUMP00000018996|aldo-keto reductase family 1, member C3|chlordecone reductase|dihydrodiol dehydrogenase 3|dihydrodiol dehydrogenase X|hydroxysteroid (17-beta) dehydrogenase 5|prostaglandin F synthase|trans-1,2-dihydrobenzene-1,2-diol dehydrogenase|type

Pathway

- [Arachidonic acid metabolism](#)
- [Metabolism of xenobiotics by cytochrome P450](#)

Disease

- [Adenocarcinoma](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Ductus Arteriosus](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Hyperandrogenism](#)
- [Infant](#)
- [Leukemia](#)
- [Lung Neoplasms](#)
- [Lymphoma](#)
- [Neoplasms](#)
- [Obesity](#)
- [Ovarian cancer](#)
- [Ovarian Failure](#)
- [Ovarian Neoplasms](#)
- [Polycystic Ovary Syndrome](#)
- [Prostate cancer](#)
- [Prostatic Hyperplasia](#)
- [Prostatic Neoplasms](#)

- [Puberty](#)
- [Pulmonary Disease](#)
- [Thrombophilia](#)
- [Tobacco Use Disorder](#)
- [Urinary Bladder Neoplasms](#)
- [Werner syndrome](#)