

Bioactive

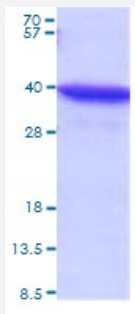
Full-Length

AKR1C3 (Human) Recombinant Protein

Catalog # P6807

Size 50 ug

Applications



15% SDS-PAGE Stained with Coomassie Blue.

Specification

Product Description	Human AKR1C3 (NP_003730, 1 a.a. - 323 a.a.) full length recombinant protein expressed in <i>Escherichia coli</i> .
Host	Escherichia coli
Theoretical MW (kDa)	36.8
Form	Liquid
Preparation Method	<i>Escherichia coli</i> expression system
Purity	> 90% by SDS-PAGE
Endotoxin Level	< 1 EU/ug
Activity	Specific activity is > 1,000 pmol/min/ug, and is defined as the amount of enzyme that catalyze the oxidation of 1.0 pmole 1-Acenaphthenol in the presence of NADP per minute at pH 8.8 at 25°C.
Quality Control Testing	SDS-PAGE Stained with Coomassie Blue 15% SDS-PAGE Stained with Coomassie Blue.
Recommend Usage	SDS-PAGE The optimal working dilution should be determined by the end user.

Storage Buffer In 20 mM Tris-HCl, 0.1 M NaCl, 1 mM DTT, pH 8.5 (10% glycerol)

Storage Instruction Store at -20°C. For long term storage store at -80°C.
Aliquot to avoid repeated freezing and thawing.

Applications

- SDS-PAGE

Gene Info — AKR1C3

Entrez GeneID [8644](#)

Protein Accession# [P42330](#)

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](#)