

Aldo-Keto Reductase Family 1 Member C3 Active Protein | AKR1C3 active protein

Recombinant Human Aldo-Keto Reductase Family 1 Member C3

CATALOG # AAA38665	HOST E Coli
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PRODUCT SYNONYMS

Aldo-Keto Reductase Family 1 Member C3; Recombinant Human Aldo-Keto Reductase Family 1 Member C3; AKR1C3 Human; Aldo-Keto Reductase Family 1 Member C3 Human Recombinant; DD3; DDX; HAKRB; HAKRe; HA1753; HSD17B5; hluPGFS; KIAA0119; AKR1C3; Aldo-keto reductase family 1 member C3; 3-alpha-HSD type 2; 17-beta-HSD 5; PGFS; DD-3; AKR1C3 active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 95.0% as determined by SDS-PAGE.
Form/Format	Sterile Filtered clear colorless solution. The AKR1C3 solution (1mg/ml) contains 20mM Tris-HCl pH-8 and 10% glycerol.
Sequence	MGSSHHH HHHSSGLVPR GSHMDS KHQCVKLNDG HFMPVLGFGT YAPPEVPRSK ALEVTKLAIE AGFRHIDSAH LYNNEEQVGL AIRSKIADGS VKREDIFYTS KLWSTFHRPE LVRPALENSL KKAQLDYVDL YLIHSPMSLK PGEELSPTDE NGKVIFDIVD LCTTWEAMEK CKDAGLAKSI GVSFNRRQL EMILNKPGLK YKPVCNQVEC HPYFNRSKLL DFCKSKDIVL VAYSALGSQR DKRWVDPNSP VLLEDPVLCA LAKKHKRTPA LIALRYQLQR GVVVLAKSYN EQRIRQNVQV FEFQLTAEDM KAIDGLDRNL HYFNSDSFAS HPNYPYSDEY
Sequence Length	323
Biological Activity	Specific activity: approximately < 0.1 units/mg. Enzymatic activity was confirmed by measuring the amount of enzyme catalyzing the oxidation of 1 micromole NADPH per minute at 25C. Specific activity was expressed as units/mg protein.
Preparation and Storage	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.

ADDITIONAL INFORMATION

Related Product Information for AKR1C3 active protein	Description: AKR1C3 Human Recombinant fused to 20 amino acid His Tag at N-terminal produced in E Coli is a single, non-glycosylated, polypeptide chain containing 343 amino acids (1-323 a.a.) and having a molecular mass of 39 kDa. The AKR1C3 is purified by proprietary chromatographic techniques. Introduction: AKR1C3 is part of the aldo/keto reductase superfamily, which has at least 40 identified proteins. AKR1C3 catalyzes the conversion of aldehydes and ketones to their corresponding alcohols by utilizing NADH and/or NADPH as cofactors. AKR1C3 displays overlapping but distinct substrate specificity. AKR1C3 catalyzes the reduction of prostaglandin (PG) D2, PGH2 and phenanthrenequinone (PQ), and the oxidation of 9alpha,11beta-PGF2 to PGD2. AKR1C3 is involved in the pathogenesis of allergic diseases such as asthma. AKR1C3 controls cell growth and/or differentiation. AKR1C3, having ability to convert androstenedione to testosterone, itakes part in adrenal testosterone production. AKR1C3 expression is affected by metabolic disease, and its levels are considerably reduced in response to diet-induced weight loss and correlate with leptin levels.
Product Categories/Family for AKR1C3 active protein	Enzymes; Reductase

NCBI AND UNIPROT INFORMATION

NCBI GI #	359806990
NCBI GeneID	8644
NCBI Accession #	NP_001240837.1
NCBI GenBank Nucleotide #	NM_001253908.1
UniProt Accession #	P42330; Q5T2L1; Q96DJ1; Q96KI8; Q99530; Q9UCX1; Q9UII3; Q9UKL9; A8K2V0; B4DL37
NCBI Official Full Name	aldo-keto reductase family 1 member C3 isoform 2
NCBI Official Synonym Full Names	aldo-keto reductase family 1, member C3
NCBI Official Symbol	AKR1C3
NCBI Official Synonym Symbols	DD3; DDX; PGFS; HAKRB; HAKRe; HA1753; HSD17B5; hluPGFS
NCBI Protein Information	aldo-keto reductase family 1 member C3; 3-alpha hydroxysteroid dehydrogenase, type II; 3-alpha-HSD type II, brain; aldo-keto reductase family 1, member C3 (3-alpha hydroxysteroid dehydrogenase, type II); chlordecone reductase homolog HAKRb; dihydrodiol dehydrogenase 3; dihydrodiol dehydrogenase X; indanol dehydrogenase; prostaglandin F synthase; testosterone 17-beta-dehydrogenase 5; trans-1,2-dihydrobenzene-1,2-diol dehydrogenase; type IIb 3-alpha hydroxysteroid dehydrogenase
UniProt Protein Name	Aldo-keto reductase family 1 member C3
UniProt Gene Name	AKR1C3
UniProt Synonym Gene Names	DDH1; HSD17B5; KIAA0119; PGFS; 17-beta-HSD 5; 3-alpha-HSD type 2; DD-3; DD3; PGFS
UniProt Entry Name	AK1C3_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-akr1c3-active-protein/aldo-keto-reductase-family-1-member-c3/38665>