# Recombinant Human AKR1C2

**Cat. No.** AKR1C2-27159TH **Lot. No.** (See product label)

## SPECIFICATION

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| **Product Overview** | Recombinant fragment corresponding to amino acids 224-323 of Human AKR1C2, with N terminal proprietary tag; predicted MW: 36.63 kDa inclusive of tag. AAH63574. |
| **Species** | Human |
| **Source** | Wheat Germ |
| **ProteinLength** | 100 amino acids |
| **Description** | 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 using NADH and/or NADPH as cofactors. The enzymes display overlapping but distinct substrate specificity. This enzyme binds bile acid with high affinity, and shows minimal 3-alpha-hydroxysteroid dehydrogenase activity. This gene shares high sequence identity with three other gene members and is clustered with those three genes at chromosome 10p15-p14. |
| **Molecular Weight** | 36.630kDa inclusive of tags |
| **Form** | Liquid |
| **Purity** | Proprietary Purification |
| **Storage buffer** | pH: 8.00Constituents:0.3% Glutathione, 0.79% Tris HCl |

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| **Storage** | Shipped on dry ice. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles. |
| **Sequences of amino acids** | EEPWVDPNSPVLLEDPVLCALAKKHKRTPALIALRYQLQRGVVVLAKSYNEQRIRQN VQVFEFQLTSEEMKAIDGLNRNVRYLTLDIFAGPPNYPFSDEY |
| **Sequence Similarities** | Belongs to the aldo/keto reductase family. |

## GENE INFORMATION

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| **Gene Name** | AKR1C2 aldo-keto reductase family 1, member C2 (dihydrodiol dehydrogenase 2; bile acid binding protein; 3-alpha hydroxysteroid dehydrogenase, type III) [ Homo sapiens ] |
| **Official Symbol** | AKR1C2 |
| **Synonyms** | AKR1C2; aldo-keto reductase family 1, member C2 (dihydrodiol dehydrogenase 2; bile acid binding protein; 3-alpha hydroxysteroid dehydrogenase, type III); DDH2; aldo-keto reductase family 1 member C2; BABP; DD; DD2; HAKRD; MCDR2; |
| **Gene ID** | 1646 |
| **mRNA Refseq** | NM_001135241 |
| **Protein Refseq** | NP_001128713 |
| **MIM** | 600450 |
| **Uniprot ID** | P52895 |

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| **Chromosome Location** | 10p15-p14 |
| **Pathway** | Metabolism of xenobiotics by cytochrome P450, organism-specific biosystem; Metabolism of xenobiotics by cytochrome P450, conserved biosystem; Steroid hormone biosynthesis, organism-specific biosystem; Steroid hormone biosynthesis, conserved biosystem; |
| **Function** | androsterone dehydrogenase (A-specific) activity; bile acid binding; carboxylic acid binding; oxidoreductase activity; trans-1,2-dihydrobenzene-1,2-diol dehydrogenase activity; |

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