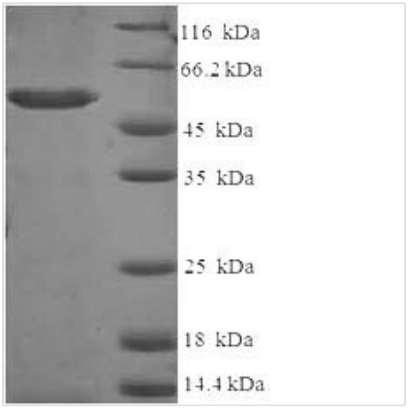
Recombinant Human Aldo-keto reductase family 1 member C2 (AKR1C2)

Product Code	CSB-EP001543HU
Relevance	Works in concert with the 5-alpha/5-beta-steroid reductases to convert steroid hormones into the 3-alpha/5-alpha and 3-alpha/5-beta-tetrahydrosteroids. Catalyzes the inactivation of the most potent androgen 5-alpha-dihydrotestosterone (5-alpha-DHT) to 5-alpha-androstane-3-alpha,17-beta-diol (3-alpha-diol). Has a high bile-binding ability.
Abbreviation	Recombinant Human AKR1C2 protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P52895
Alias	3-alpha-HSD;3Chlordecone reductase homolog HAKRD;Dihydrodiol dehydrogenase 2 ;DD-2 ;DD2Dihydrodiol dehydrogenase/bile acid-binding protein ;DD/BABPTrans-1,2-dihydrobenzene-1,2-diol dehydrogenase (EC:1.3.1.20);Type III 3-alpha-hydroxysteroid dehydrogenase (EC:1.1.1.357)
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MDSKYQCVKLNDGHFMPVLGFGTYAPAEVPKSKALEAVKLAIEAGFHHIDSAH VYNNEEQVGLAIRSKIADGSVKREDIFYTSKLWSNSHRPELVRPALERSLKNLQ LDYVDLYLIHFPVSVKPGEEVIPKDENGKILFDTVDLCATWEAMEKCKDAGLAK SIGVSNFNHRLLEMILNKPGLKYKPVCNQVECHPYFNQRKLLDFCKSKDIVLVA YSALGSHREEPWVDPNSPVLLEDPVLCALAKKHKRTPALIALRYQLQRGVVVL AKSYNEQRIRQNVQVFEFQLTSEEMKAIDGLNRNVRYLTLDIFAGPPNYPFSDE Y
Research Area	Metabolism
Source	E.coli
Target Names	AKR1C2
Expression Region	1-323aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	52.7kDa
Protein Length	Full Length

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

Insertion of the gene encoding the Human AKR1C2 protein (1-323aa) into a plasmid vector results in the formation of recombinant plasmid, which is then introduced into e.coli cells. Positive e.coli cells are selected relying on their ability to survive in the presence of a specific antibiotic. The e.coli cells containing the recombinant plasmid are cultured under conditions conducive to the expression of the gene of interest. A N-terminal 6xHis-SUMO tag is attached to the protein. Following expression, the recombinant Human AKR1C2 protein is isolated and purified from the cell lysate through affinity purification. The resultant recombinant Human AKR1C2 protein is analyzed using denaturing SDS-PAGE, revealing a purity greater than 90%.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.
Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.