

## Product datasheet for **TP300210L**

### AKR1C3 (NM\_003739) Human Recombinant Protein

#### Product data:

|                                       |   |
|---------------------------------------|---|
| Product Type:                         | Recombinant Proteins  |
| Description:                          | Recombinant protein of human aldo-keto reductase family 1, member C3 (3-alpha hydroxysteroid dehydrogenase, type II) (AKR1C3), 1 mg |
| Species:                              | Human   |
| Expression Host:                      | HEK293T   |
| Expression cDNA Clone or AA Sequence: | >RC200210 protein sequence<br><b>Red</b> =Cloning site <b>Green</b> =Tags(s)  |

MDSKHQCVKLNDGHFMPVLGFGTYAPPEVPRSKALEVTKLAIEAGFRHIDSAHLYNNEEQVGLAIRSKIA  
DGSVKREDIFYTSKLWSTFHRPELVRPALENSLKKALDYVDLYLIHSPMSLKPGEELSPTDENGKVID  
IVDLCTTWEAMEKCKDAGLAKSIGVSNFNRRQLEMILNKPGLKYKPCVNQVECHPYFNRSKLLDFCKSKD  
IVLVAYSALGSQRDKRWDPNSPVLLEDVLCALAKKHKRTPALIALRYQLQRGVVLAQSYNEQRIRQN  
VQVFQQLTAEDMKAIDGLDRNLHYFNDSFASHPNYPYSDEY

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

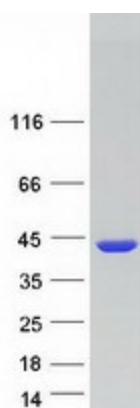
|                |  |
|----------------|--|
| Tag:           | C-Myc/DDK  |
| Predicted MW:  | 36.7 kDa   |
| Concentration: | >0.05 µg/µL as determined by microplate BCA method   |
| Purity:        | > 80% as determined by SDS-PAGE and Coomassie blue staining  |
| Buffer:        | 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol   |
| Preparation:   | Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.                                     |
| Note:          | For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process. |
| Storage:       | Store at -80°C.  |
| Stability:     | Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.        |
| RefSeq:        | <u><a href="#">NP_003730</a></u>   |
| Locus ID:      | 8644   |



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|                   |  |
|-------------------|--|
| UniProt ID:       | <a href="#">P42330</a>   |
| RefSeq Size:      | 1251   |
| Cytogenetics:     | 10p15.1  |
| RefSeq ORF:       | 969  |
| Synonyms:         | DD3; DDX; HA1753; HAKRB; HAKRe; hluPGFS; HSD17B5; PGFS   |
| Summary:          | <p>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. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2011]</p> |
| Protein Families: | Druggable Genome   |
| Protein Pathways: | Arachidonic acid metabolism, Metabolism of xenobiotics by cytochrome P450  |

### Product images:



Coomassie blue staining of purified AKR1C3 protein (Cat# [TP300210]). The protein was produced from HEK293T cells transfected with AKR1C3 cDNA clone (Cat# [RC200210]) using MegaTran 2.0 (Cat# [TT210002]).