

Human Recombinant AKR7A3

CATALOG #:	6334-50	50 µg
ALTERNATE NAMES:	Aldo-keto reductase family 7, member A 3, Aflatoxin B1 aldehyde reductase member 3, AFB1 aldehyde reductase 2(AFAR2).	
SOURCE:	E.Coli	
PURITY:	> 95% by SDS - PAGE	
MOL. WEIGHT:	41.6 kDa (370 aa, 1-331 aa + His Tag (NT))	
FORMULATION:	0.5 mg/ml solution in 20 mM Tris-HCl buffer (pH 8.0) containing 0.1 M NaCl and 10% glycerol.	

STORAGE CONDITIONS:

Can be stored at 4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

DESCRIPTION:

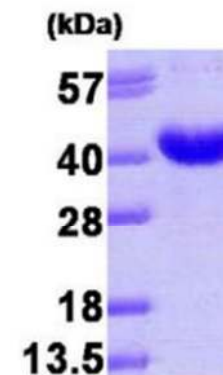
AKR7A3, is a member of the aldo/keto reductase superfamily, which consists of more than 40 known enzymes and proteins. It takes part in the detoxification of aldehydes and ketones. AKR7A3 reduces the dialdehyde protein-binding form of aflatoxin B1 (AFB1) to the non-binding AFB1 dialcohol. AKR7A3 participates in protection of liver against the toxic and carcinogenic effects of AFB1, a potent hepatocarcinogen.

AMINO ACID SEQUENCE:

MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWGSELE SRQLSRARPA
 TVLGAMEMGR RMDAP TSAAV TRAFLE RGH T EIDTAFVYSE GQSETILGGL
 GLRLGGSDCR VKIDTKAIPL FGNSLKPDSL RFQLETSLKR LQCPRVDLFY LHMPDHSTPV
 EETLRACHQL HQEGKFVELG LSNYAAWEVA EICTLCKSNG WILPTVYQGM YNAITRQVET
 ELFPCLRHFH LRFYAFNPLA GLLTGKYKY EDKDGKQPVG RFFGNTWAEM
 YRNRYWKEHH FEGIALVEKA LQAAYGASAP SM TSATLRWM YHHSQLQGAH
 GDAVILGMSS LEQLEQLLAA AEEGPLPAV VDAFNQAWHL VAHECPNYFR

BIOLOGICAL ACTIVITY:

Specific activity is 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 25°C. Specific activity was expressed as units/mg protein.



15% SDS-PAGE (3µg)

Human Recombinant AKR7A3

RELATED PRODUCTS:

- Aldehyde Dehydrogenase Activity Colorimetric Assay kit (Cat. No. K731-100)
- PicoProbe™ Aldehyde Dehydrogenase Activity Assay kit (Cat. No. K741-100)
- Human recombinant ALDH2 (Cat. No. 6332-100)
- Human recombinant ALDH3A1 (Cat. No. 6333-50)
- Human recombinant AKR7A2 (Cat. No. 6335-50)
- Human recombinant AKR1C1 (Cat. No. 6336-50)
- Human recombinant AKR1C3 (Cat. No. 6337-50)
- Human recombinant AKR1C4 (Cat. No. 6338-50)
- Human recombinant AKR1B10 (Cat. No. 6339-50)

FOR RESEARCH USE ONLY! Not to be used in humans.