

## Product datasheet for **AR09375PU-N**

### **AKR7A3 / AFAR2 (1-331, His-tag) Human Protein**

#### **Product data:**

<b>Product Type:</b>	Recombinant Proteins
<b>Description:</b>	AKR7A3 / AFAR2 (1-331, His-tag) human recombinant protein, 50 µg
<b>Species:</b>	Human
<b>Expression Host:</b>	E. coli
<b>Expression cDNA Clone or AA Sequence:</b>	<u>MRGSHHHHHH</u> GMASMTGGQQ MGRDLYDDDD KDRWGSELEM SRQLSRARPA TVLGAMEMGR RMDAP TSAAV TRAFLE RGH T EIDTAFVYSE GQSETILGGL GLRLGGS DCR VKIDTKAIPL FGNSLKPDSL RFQLETS LKR LQCPRVDLFY LHMPDHSTPV EETLRACHQL HQEGKFVELG LSNYAAWEVA EICTLCKSNG WILPTVYQGM YNAITRQVET ELFPCLRHFG LRFYAFNPLA GLLTGKYKY EDKDGKQPVG RFFGNTWAEM YRNRWKEHH FEGIALVEKA LQAAYGASAP SM TSATLRWM YHHSQLQGAH GDAVILGMSS LEQLEQNLAA AEEGPLPAV VDAFNQAWHL VAHECPNYFR
<b>Tag:</b>	His-tag
<b>Predicted MW:</b>	41.6 kDa
<b>Concentration:</b>	lot specific
<b>Purity:</b>	>95% by SDS - PAGE
<b>Buffer:</b>	Presentation State: Purified State: Liquid purified protein Buffer System: Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol
<b>Bioactivity:</b>	Biological: Specific activity approximately < 0.1 units/mg protein. Enzymatic activity was confirmed by measuring the amount of enzyme catalyzing the oxidation of 1 micromole NADPH per minute at 25°C.

#### Activity Assay

1. Prepare a 1.0 ml reaction mix into a suitable container : The final concentrations are 0.1M sodium phosphate (pH 7.0), 10mM DL-glyceraldehyde, 0.3mM NADPH.
2. Add 50 ul of recombinant AKR7A3 solution with various concentrations (2.5ug, 5ug, 10ug) in 750 ul reaction buffer.
3. Mix by inversion and incubate at 25°C for 2.5 minutes.
4. Add 200 ul of 50 mM DL-glyceraldehyde as a substrate and immediately mix by inversion.
5. Record the increase in A340nm for 3 minutes.



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Preparation:	Liquid purified protein
Protein Description:	Recombinant human AKR7A3, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Storage:	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	<a href="#">NP_036199</a>
Locus ID:	22977
UniProt ID:	<a href="#">O95154</a> , <a href="#">A0A384MDN8</a>
Cytogenetics:	1p36.13
Synonyms:	AFAR2
Summary:	Aldo-keto reductases, such as AKR7A3, are involved in the detoxification of aldehydes and ketones.[supplied by OMIM, Apr 2004]
Protein Families:	Druggable Genome

**Product images:**