

## Biocatalysis Enzyme Product Specification Sheet

<b>Cat. No.:</b>	PRO-AKR(004)	<a href="#">add this product to cart</a>
<b>LOT:</b>	2011-1	<a href="#">view other aldo-keto reductases</a>
<b>Activity:</b>	Aldo-keto reductase	
<b>Synonyms:</b>	Ketoreductase, KRED, AKR	
<b>Source organism:</b>	Disclosed on signing <a href="#">Biocatalysis Enzyme Toolkit</a> Agreement	
<b>Enzyme Commission No.:</b>	1.-	
<b>Activity:</b>	Characterisation underway, see summary on <a href="#">Aldo-Keto Reductase (KRED) Panel summary page</a>	
<b>Specific activity:</b>	-	
<b>Purity:</b>	See <a href="#">SDS-PAGE gel image</a> below	
<b>Form and storage:</b>	Supplied as a freeze-dried powder / cake, store at -20°C (shipped at room temperature)	
<b>pH optimum:</b>	Not determined	
<b>Temperature optimum:</b>	Originates from mesophilic microorganism	
<b>[Enzyme]:</b>	~ 10 % (w/w) – see SDS-PAGE gel image	
<b>Sequence length:</b>	270 amino acids	
<b>Accession No.:</b>	-	
<b>Molecular weight:</b>	33039.2 Da (theoretical)	
	~ 33000 Da (observed by SDS-PAGE)	
	- (observed by mass spectrometry)	
<b>Biological function:</b>	Catalyses the inter-conversion of ketones and secondary alcohols (or aldehydes and primary alcohols)	
<b>Potential application(s):</b>	<a href="#">Biocatalysis</a> , <a href="#">fundamental research</a>	
<b>Comments:</b>	This biocatalyst can be acquired either individually by regular purchase, or as a component of the <a href="#">Biocatalysis Enzyme Toolkit</a>	
<b>Usage:</b>	Bring vial and contents to room temperature before opening. See MSDS sheet	
<b>Assay:</b>	-	

**Primary sequence:**

Disclosed on signing *Biocatalysis Enzyme Toolkit* Agreement

**Literature:**

Proprietary GRASP™ high-throughput cloning technology has been employed to evenly sample natural substrate specificity from the public and in-house genomics databases, and thus no scientific literature is available in general. In the vast majority of cases preparation for this novel Aldo-Keto Reductase (KRED) Panel will be the first time many of the corresponding genes will have been exploited from nature

**SDS-PAGE analysis:**