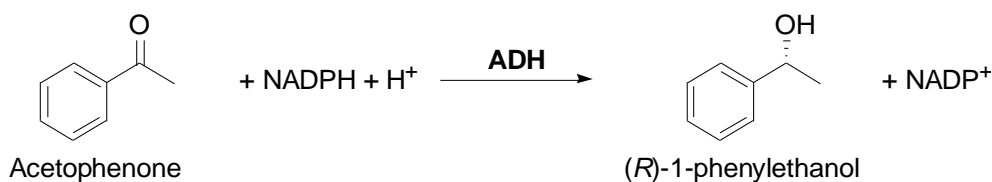


## Alcohol Dehydrogenase 270

evo-1.1.270

**Application:** (*R*)-selective reduction of ketones and aldehydes

**Educts:** aromatic, cyclic and aliphatic ketones, aldehydes



**enzyme properties:** > Fast, stable in processes, high tolerance to organic solvents!

**stereoselectivity:** (*R*)-selective  
**properties:** pH<sub>opt</sub>: 7.0 (reduction), T<sub>opt</sub>: 50°C  
**cofactor dependence:** NADPH  
**cofactor regeneration:** 2-Propanol as co-substrate  
**source:** recombinant from *E.coli*

**activity and formulations:** > 450 U/mL\* technical grade, liquid  
 > 3,5 U/mg\* lyoph. lyophilized, powder for test purposes  
 ref. substrate: Acetophenone

**availability:** standard quantities (lyophilisates) are available from stock  
**bulk quantities:** for bulk quantities, pricing and conditions please inquire

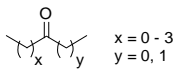

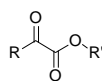
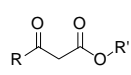

\*U = Enzymatic Unit. 1 U is defined as the amount of enzyme that converts 1 μmol of a defined substrate in one minute. It is strictly dependent on the substrate referred to. The reference substrates in this catalog is always given for each enzyme individually.

Alcohol Dehydrogenase Kit

evo-1.1.100

Tab. 1: Overview of alcohol dehydrogenases and activities available from evocatal

(+++ very high activity, ++ high activity, + fair activity, - no activity)

evozyme cat. no:	1.1.010	1.1.020	1.1.030	1.1.040	1.1.130	1.1.140	1.1.190 <sup>2</sup>	1.1.200	1.1.210	1.1.250	1.1.260	1.1.270
<b>selectivity:</b>	(R/S) <sup>1</sup>	(R/S) <sup>1</sup>	(S)	(R/S) <sup>1</sup>	(R)	(S)	(R)	(R)	(S)	(S)	(R/S) <sup>1</sup>	(R)
<b>cofactor:</b>	NAD	NAD	NAD	NAD	NAD	NAD	NADP	NAD	NAD	NADP	NADP	NADP
 <b>aliphatic ketones</b>	++	++	++	+	-	-	-	+++	-	+	++	++
 <b>acetophenone and derivatives</b>	-	+	++	-	-	-	-	++	-	-	-	++
 <b>α-ketoesters and derivatives</b>	+++	++	+	-	+++	+++	-	++	+	+	-	-
 <b>β-ketoesters and derivatives</b>	+++	++	+	-	-	-	-	+++	+	++	-	+++
$R-CHO$ R = aliphatic side chain <b>aldehydes</b>	-	++	-	+++	-	-	+++	-	++	+	-	+
 <b>cyclic ketones</b>	+	+	-	-	-	-	-	++	+	-	++	++

<sup>1</sup>substrate dependent (R)- or (S)-selective

<sup>2</sup>evo-1.1.190 prefers (R)-glyceraldehyde over (S)-glyceraldehyde.

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