

We offer various packaging (protein concentration,activity,etc.) if necessary.

Data sheet

Enzyme	:	Aldehyde dehydrogenase
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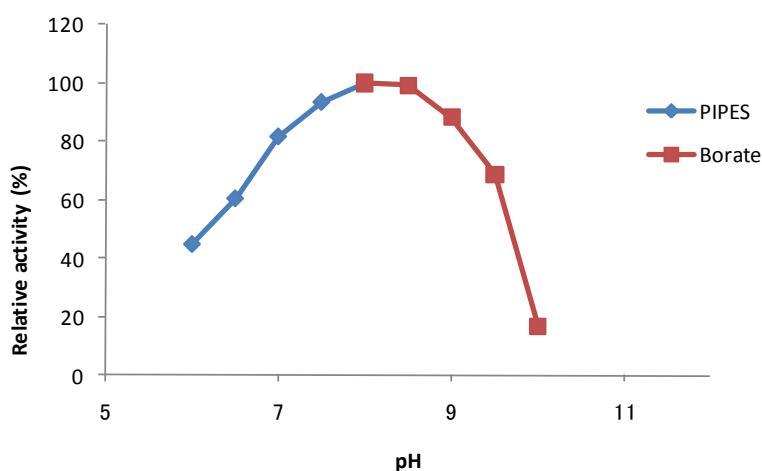
Code	;	ALD-35-01
Lot #	;	1-I001T
Protein conc.	;	—
Volume	;	ml
Form	;	20 mM Tris-HCl (pH 7.5), 50 mM NaCl
Storage	;	-20°C
Activity	;	U/ml (@50°C, pH8.0)
Notes	;	For research use only.

•Activity measurement :

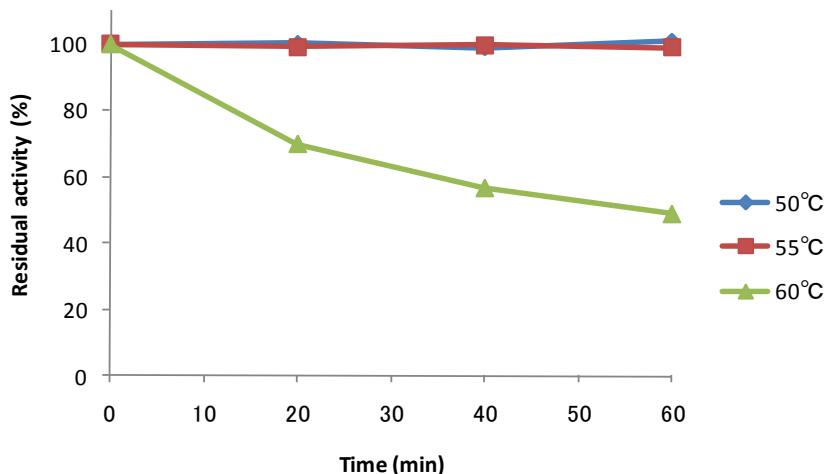
Reaction mix (50 mM PIPES-KOH (pH 8.0), 0.5 mM NAD⁺, 10 mM Butyraldehyde and appropriate amount of the enzyme) was incubated at 50 °C and A340 was monitored.

One unit is defined as the amount of the enzyme reducing 1 μmol of NAD⁺ ($\epsilon_{340}=6.22 \text{ mM}^{-1} \text{ cm}^{-1}$ for NADH) per 1 minute using Butyraldehyde as a substrate.

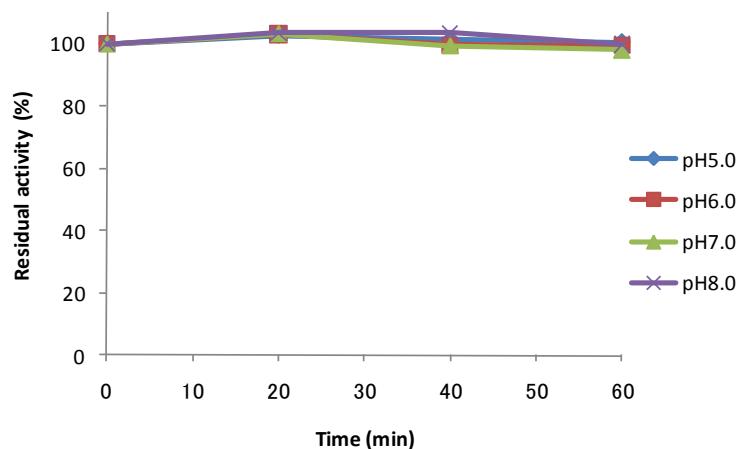
◆ Optimum pH



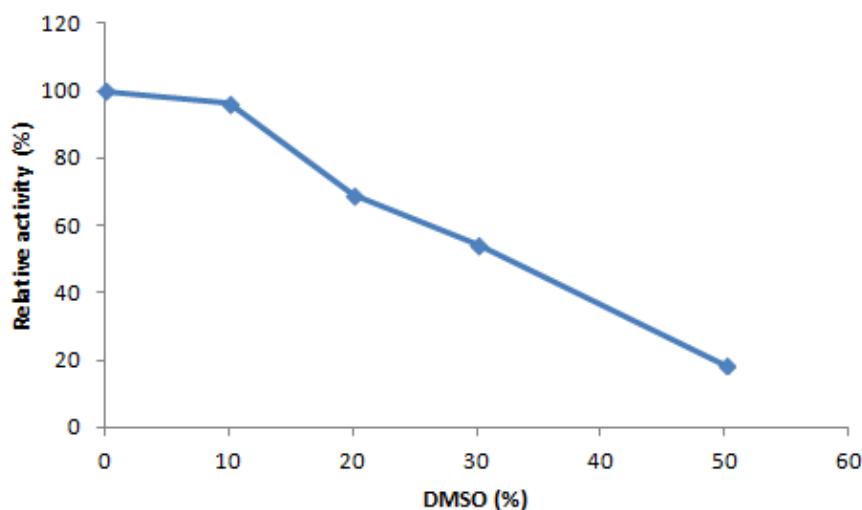
◆ Thermostability



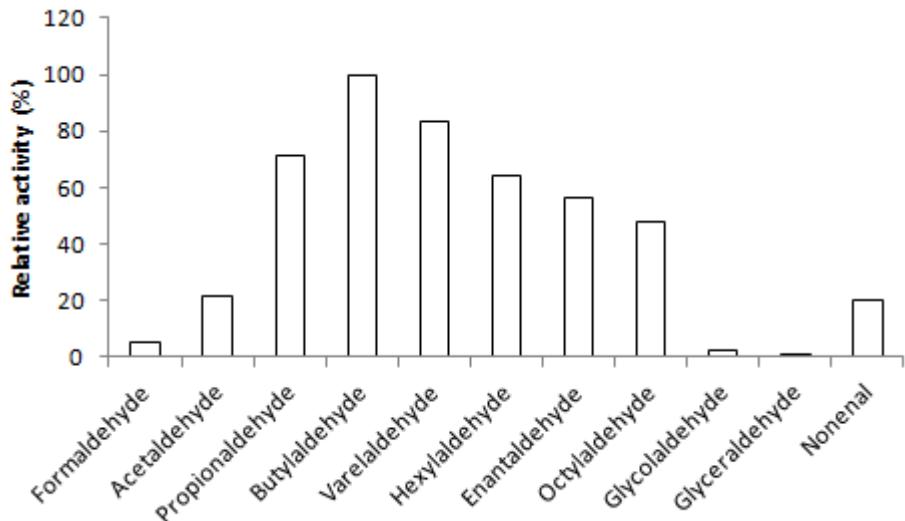
◆ pH stability



◆ Activity in organic solvent



◆ Substrate specificity



◆ Kinetic parameters

Butyraldehyde : $K_m=3.8$ mM (@50°C, pH8.0)

NAD⁺ : $K_m=0.026$ mM (@50°C, pH8.0)