

There is a possibility of changing the 'Code' and/or 'Lot No.'

'Protein conc.' and 'Activity' might vary between lots.

Data sheet

Enzyme ; **Secondary alcohol dehydrogenase A**

Code ; SAD-75-01

Lot No. ; 1-S201T

Protein conc. ; 15 mg/ml

Volume ; 1 ml

Form ; 20 mM Tris-HCl (pH 8.0)

Storage ; -20 °C

Activity ; 105 U/ml

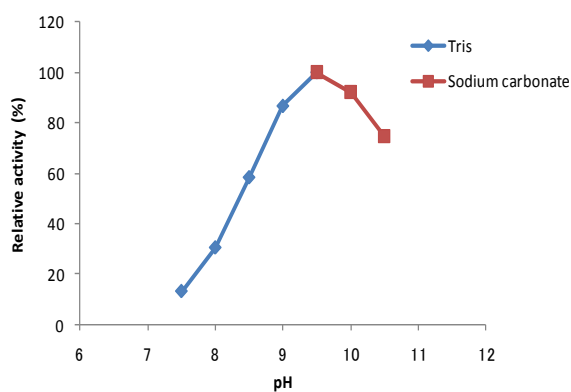
Notes ; For research use only.

Activity measurement

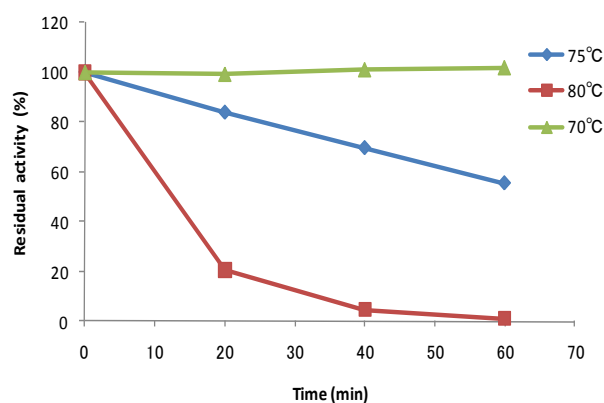
Reaction mix (50 mM Sodium carbonate buffer (pH 9.5), 500 mM (R)-1, 3-Butanediol, 0.5 mM NADP⁺ and appropriate amount of the enzyme) was incubated at 50 °C and A₃₄₀ was monitored.

One unit is defined as the amount of enzyme reducing 1 μmol of NADP⁺ per minute using $\epsilon_{340}=6.22 \text{ mM}^{-1} \text{ cm}^{-1}$.

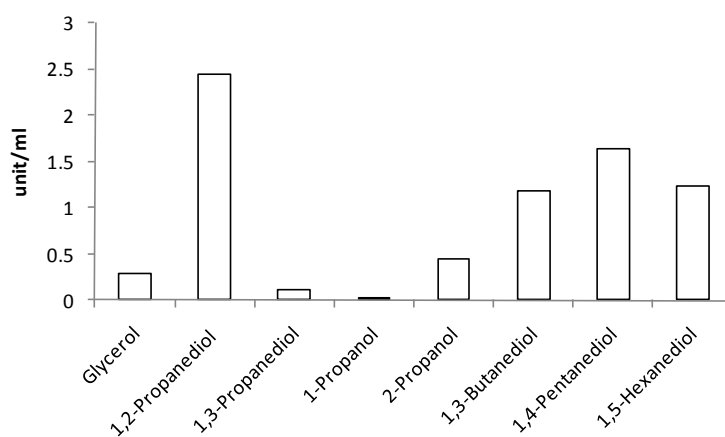
pH profile



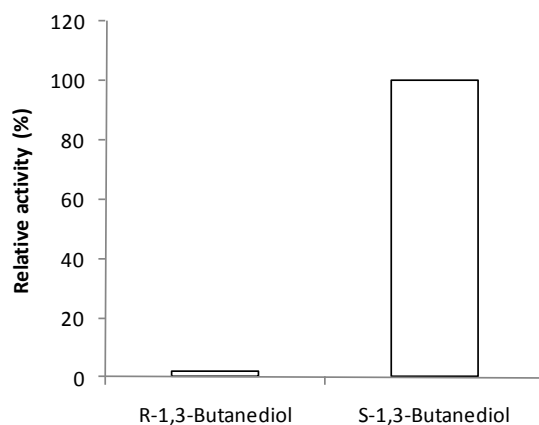
Thermostability



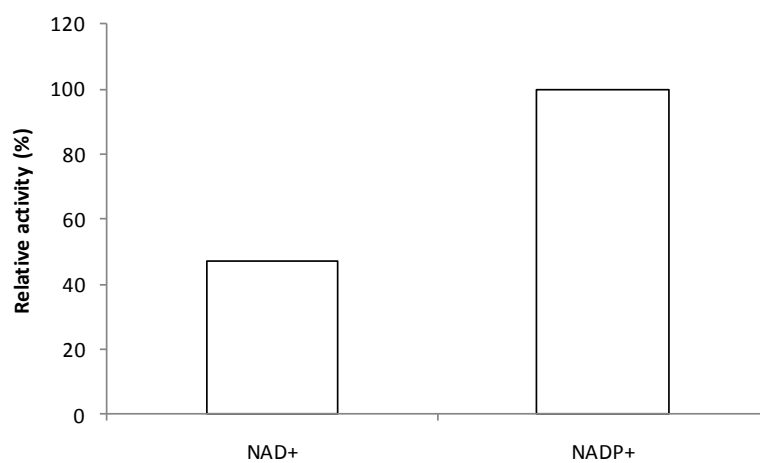
Substrate specificity



Chiral specificity



Co-enzyme specificity



Kinetic parameters

K_m for (S)-1,3-Butanediol : 122 mM
 K_m for NADP⁺ : 0.029 mM
 K_m for NAD⁺ : 0.27 mM