

Table 1.

Effect of Various Chemicals on MDH

[The enzyme dissolved in 100mM Tris-HCl buffer, pH 7.5 (17U/ml) was incubated with each chemical at 37°C for 2hr.]

Chemical	Concn.(mM)	Residual activity	Chemical	Concn. (mM)	Residual activity
None	-	100%	BME	2.0	111%
CaCl ₂	2.0	103%	NEM	2.0	156%
CoCl ₂	2.0	98%	EDTA	5.0	103%
CuSO ₄	2.0	73%	NaN ₃	20.0	108%
FeCl ₃	2.0	105%	Proclin	0.045%	110%
MgSO ₄	2.0	104%	Boric Acid-Borax	2.0	110%
MnSO ₄	2.0	104%	Na-cholate	0.10%	117%
NiCl ₂	2.0	37%	SDS	0.05%	3%
ZnSO ₄	2.0	111%	Triton X-100	0.10%	118%
K ₄ Fe(CN) ₆	2.0	91%	Tween 20	0.10%	116%

Fig.1 pH Activity

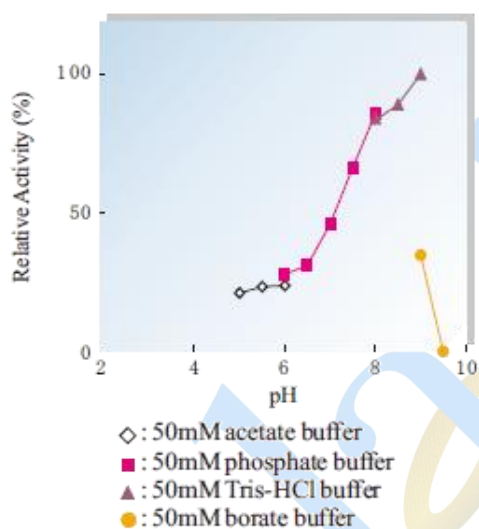


Fig.3 Temperature activity

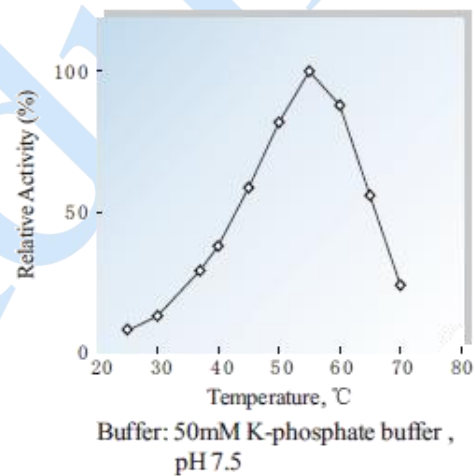
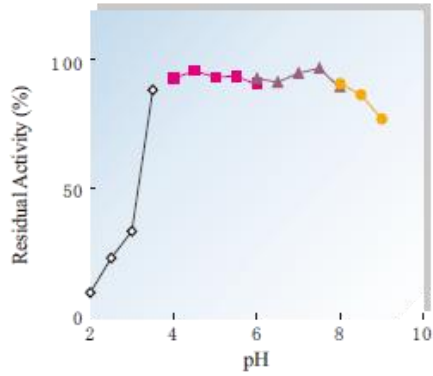
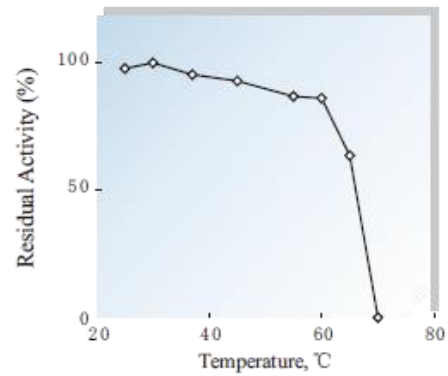


Fig. 2 pH Stability



Treatment : 25 °C, 20hr
◇ : 50mM Glycine-HCl buffer
■ : 50mM acetate buffer
▲ : 50mM phosphate buffer
● : 50mM Tris-HCl buffer

Fig. 4 Thermal stability



Treatment: 50mM K-phosphate buffer,
pH 7.5, 15min

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