

Table 1 Table displaying the initial reaction rates of ALDH

		[Substrate] (mM)										
		0,0	0,1	0,5	1,0	2,5	5,0	10,0	15,0	25,0	30,0	50,0
Initial Velocity (mM/min)	1	0,000	0,097	0,166	0,249	0,288	0,335	0,444	0,515	0,534	0,581	0,529
	2	0,000	0,124	0,098	0,278	0,302	0,406	0,466	0,458	0,514	0,541	0,587
	3	0,000	0,119	0,146	0,231	0,299	0,330	0,431	0,554	0,580	0,501	0,594
	avg	0,000	0,113	0,137	0,253	0,296	0,357	0,447	0,509	0,543	0,541	0,570

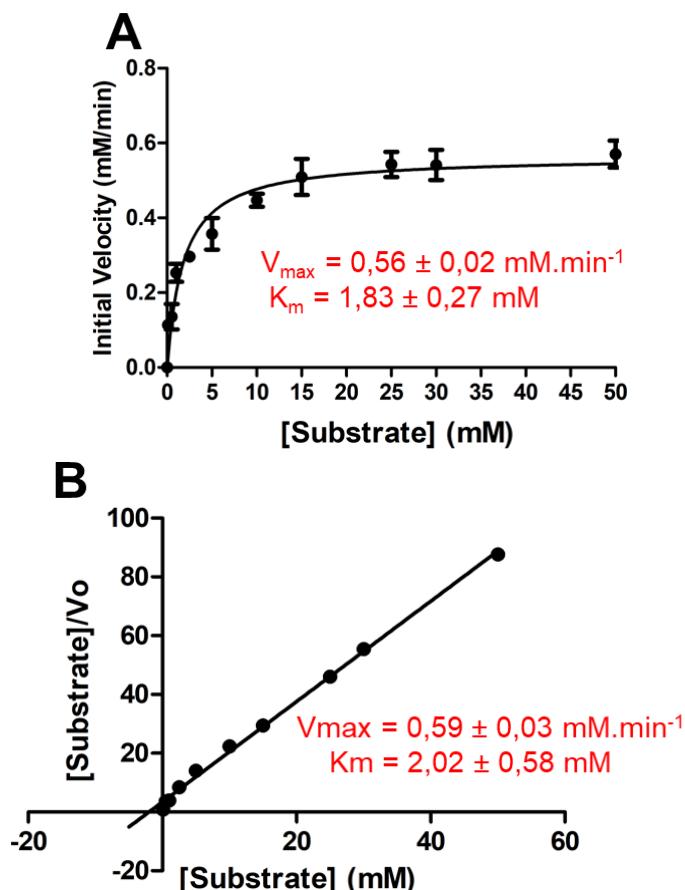


Figure 1 Enzyme Activity of ALDH.

Figures A is the Michaelis-Menton interpretation of the enzyme activity data. Figures B is the Hanes Woolf plot which is the linearization of the Michaelis-Menton plots. n = 3. The Michaelis-Menton and Hanes Woolf plots were fitted using GraphPad Prism Software (San Diego, CA, USA) www.graphpad.com.

Table 2 Table of initial reaction rates of ADH.

Initial Velocity (mM/min)	[Substrate] (mM)												
	0,0	0,05	0,1	0,5	1,0	5,0	10,0	15,0	20,0	40,0	60,0	80,0	100,0
1	0,000	0,0214	0,04887	0,06784	0,247	0,4278	0,4831	0,5137	0,7152	0,8801	1,2699	0,8548	1,0323
2	0,000	0,0484	0,05745	0,0987	0,1987	0,5383	0,4907	0,689	0,6683	0,7645	1,0664	1,2161	1,1985
3	0,000	0,0124	0,04578	0,1087	0,2879	0,3982	0,5575	0,7459	0,6783	0,9521	0,8835	1,0292	0,9954
avg	0,000	0,027	0,051	0,092	0,245	0,455	0,510	0,650	0,687	0,866	1,073	1,033	1,075

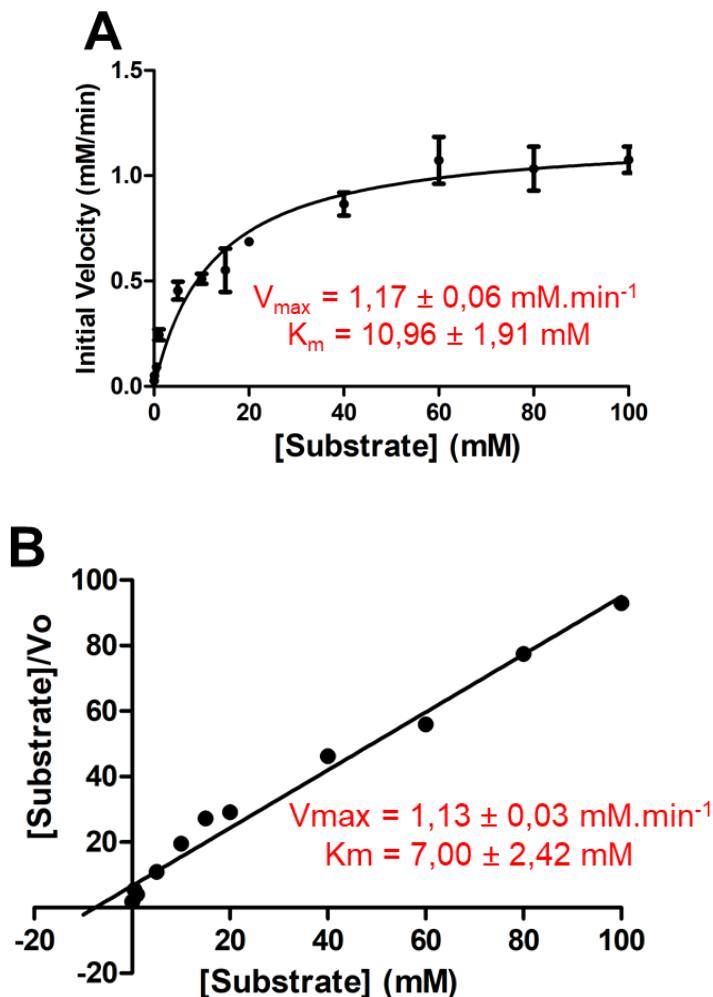


Figure 2 Enzyme Activity of ADH.

Panel A depicts the Michaelis-Menton plot of enzyme activity. The same data is converted to the linear Hanes-Woolf plot in panel B. n = 3. The Michaelis-Menton and Hanes Woolf plots were fitted using GraphPad Prism Software (San Diego, CA, USA) www.graphpad.com.

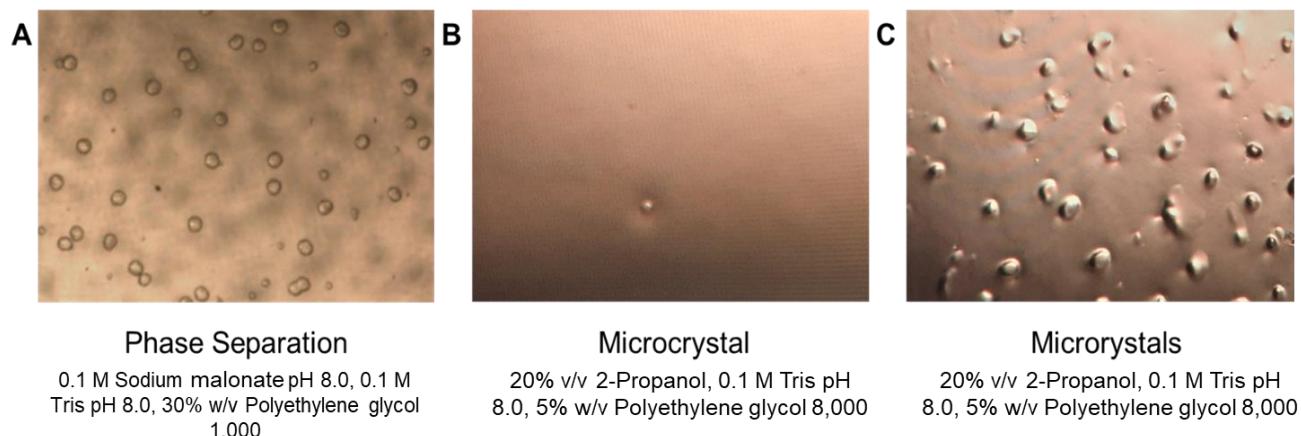


Figure 3 Images from crystallisation experiments.

A and B: Initial LAP screening experiment. C: LAP crystals after seeding. Imaged with digital microscope VHX-100 (Keyence, Osaka, Japan) 200x magnification.

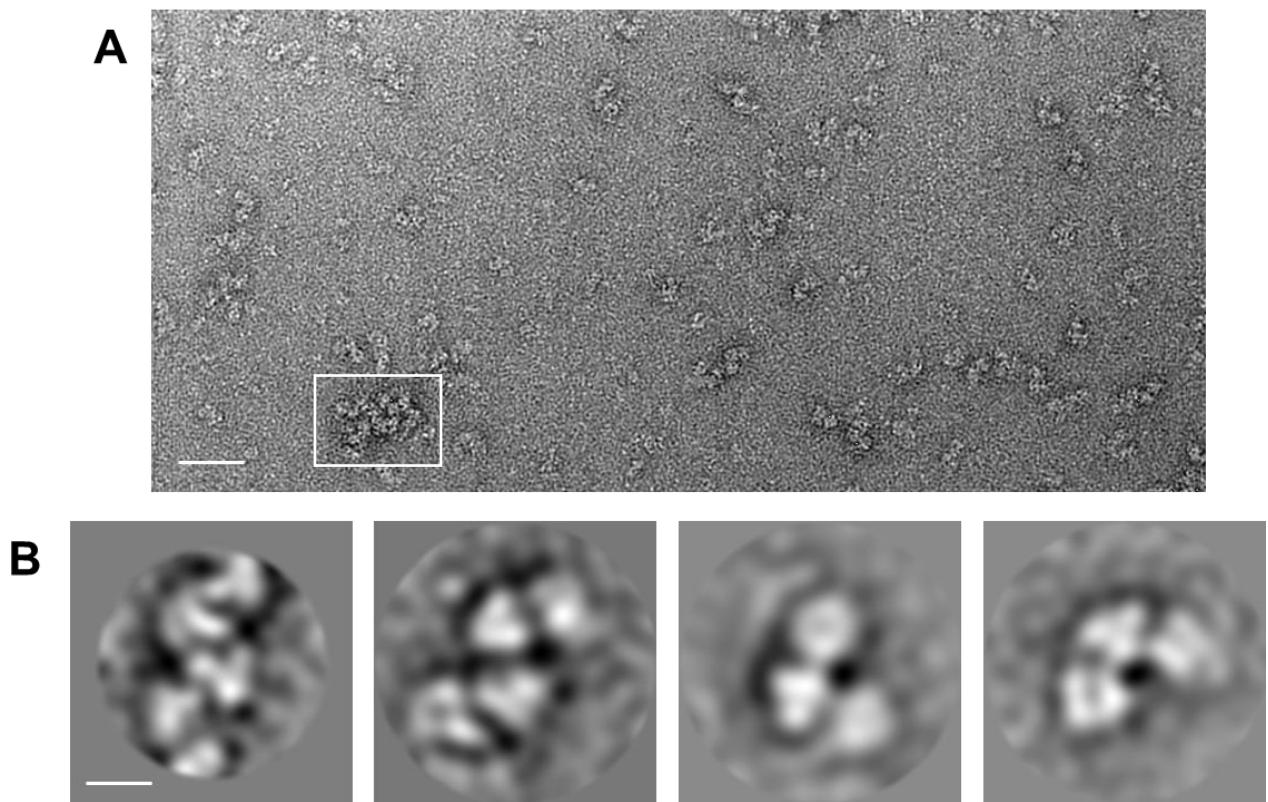


Figure 4 Negative stain EM images of LAP.

A. Original negative stain EM image of LAP showing filamentous or possibly helical fragments. Scale bar 120 nm. Figure B displays some 2D class averages of the fragments seen in figure A. Scale bar 9 nm.