

Affinity Chromatography of Morphine Dehydrogenase from *P. putida M.10* using Mimetic Orange 3

A two-step purification procedure for morphine dehydrogenase from crude extracts of *Pseudomonas putida M10* (*P. Putida M.10*) using Mimetic Orange 3 followed by Mimetic Red 2.

Experimental Conditions

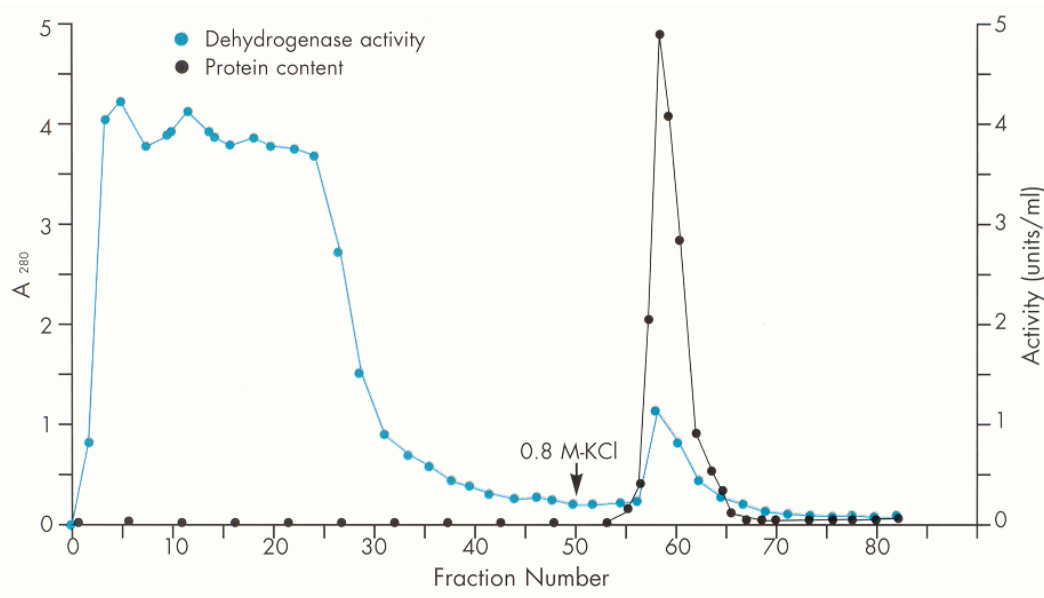
Purification from 40 g wet weight cell paste.

Results

Table 1. Purification of morphine dehydrogenase from crude extracts of *P. putida M.10*.

Purification Step	Volume (ml)	Total Activity (Units)	Total Protein (mg)	Specific Activity (Units/mg-1)	Recovery of Activity (%)	Purification Factor
Crude Extract	100	116.5	1886	0.062	100	-
Mimetic Orange 3	60	161	24.1	6.7	138	108
Mimetic Red 2	2	98	1.3	75.4	84	1216

Fig 1. Affinity chromatography of morphine dehydrogenase on Mimetic Orange 3.



Reference

Microbial Degradation of the Morphine Alkaloids. Purification and characterization of morphine dehydrogenase from *Pseudomonas putida M10*. Bruce NC, Wilmot CJ, Jordan KN, Stephens LD, Lowe CR. Institute of Biotechnology, University of Cambridge, U.K. *Biochem. J.* (1991) 274 (875–880).