

Supporting Information

Table S1. Summary of switching valve positions for each cycle of the system.

Cycle	Switch Valve 1	Switch Valve 2	Switch Valve 3	Dig. Col. 1	Dig. Col. 2	Sep. Col. 1	Sep. Col. 2
1	Black	Black	Black	Load + Digest	Elute	Wash	Elute
2	White	White	White	Elute	Load + Digest	Elute	Wash

Table S2. Summary of gradients used for each HPLC pump required for each cycle of the system.

Pump 1	Pump 2		Pump 3	
Equilibrate, 5 min	Gradient Elution		Wash and Equilibration	
Load, 30 min	Time	%B	Time	%B
Wash, 5 min	0	5	0	5
Load enzyme, 5 min	2	10	30	80
Digest, 30 min	40	45	40	0
Wash, 5 min	50	65	80	0
Total time: 80 min	60	80	Total time: 80 min	
	Total time: 80 min			