

Fig. S1 SDS-PAGE analysis of purified Aly7A and Aly7A-CD. Lane M protein: protein marker; Lane 1: purified Aly7A; Lane 2: purified Aly7A-CD

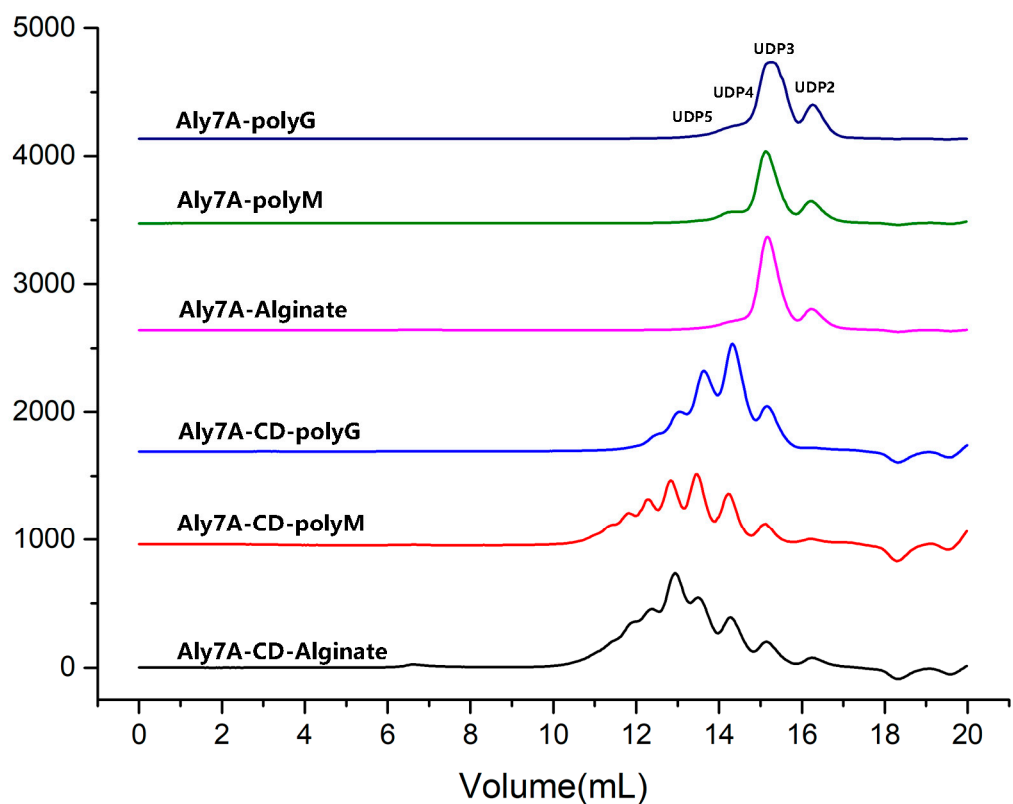


Fig. S2 FPLC analysis of Aly7A and Aly7A-CD final degrading products towards alginate, polyM and polyG.

Table S1. Kinetic parameters of Aly7A and Aly7A-CD

Enzymes	Substrates	$V_{max}(\mu\text{mol}\cdot\text{s}^{-1})$	$K_m(\text{mM})$	$k_{cat}(\text{s}^{-1})$	k_{cat}/K_m
Aly7A	Alginate	0.22	0.23	17.3	75
	polyM	0.23	0.40	17.6	44
	polyG	0.14	0.34	10.9	32
Aly7A-CD	Alginate	0.18	0.38	12.9	34
	polyM	0.17	0.36	12.1	33

polyG

0.14

0.29

10.1

35
