

## Supplementary Information

# Sustainable Synthesis of *N*-acetylactosamine using an Immobilized $\beta$ -Galactosidase on a Tailor Made Porous Polymer

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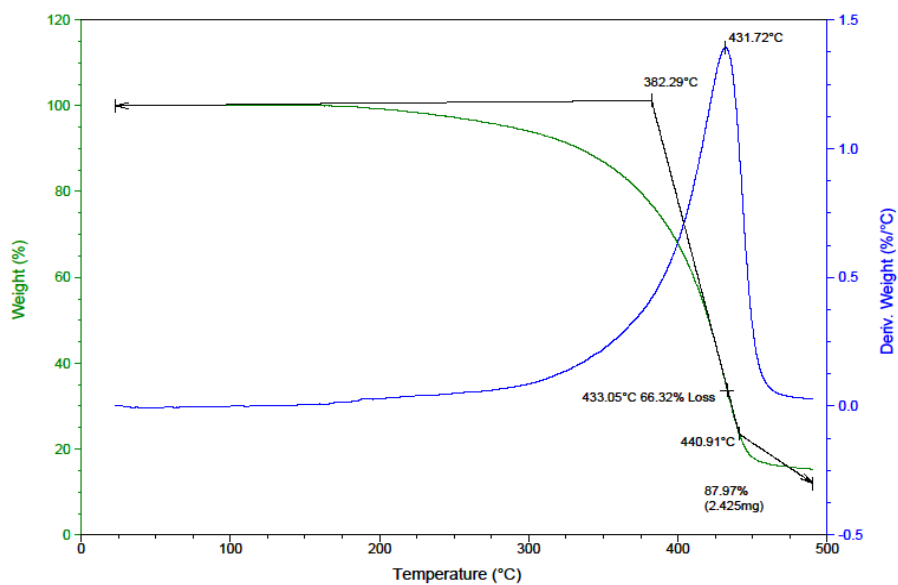
**Table S1.** Copolymerization conditions and properties of poly(AGE-*co*-DVB)

Entry	Polymerization Conditions <sup>a</sup>				Polymer Properties			
	Monomer (% AGE)	Cross-linker (% DVB)	Initiator (% AIBN)	T <sup>a</sup> (°C)	Yield (%)	Pore volume (mL/g)	Pore size (nm)	Surface area (m <sup>2</sup> /g)
1	50	50	1	70	55	1.3	12	489
2	50	50	5	70	59	1.1	11	449
3	50	50	1	90	51	1.6	9	790
4	50	50	5	90	56	1.9	12	682
5	50	50	1	120	50	1.6	9	795
6	50	50	5	120	54	1.8	11	690
7	60	40	1	70	43	1.5	9	746
8	60	40	5	70	47	1.4	11	583
9	60	40	10	70	50	1.4	12	470
10	60	40	15	70	51	1.7	14	540
11	60	40	1	90	56	2.1	12	794
12	60	40	5	90	46	1.7	12	631
13	60	40	10	90	48	1.1	9	511
14	60	40	15	90	48	0.9	8	485
15	60	40	1	120	47	1.4	10	594
16	60	40	5	120	46	0.3	4	433
17	70	30	1	70	32	1.6	9	804
18	70	30	5	70	38	1.9	14	563
19	70	30	10	70	40	2.1	14	482
20	70	30	15	70	40	1.6	15	473
21	70	30	1	90	34	1.8	11	709
22	70	30	5	90	35	1.4	9	701
23	80	20	5	70	27	1.8	14	530
24	80	20	10	70	31	1.6	16	433
25	80	20	15	70	30	0.9	13	290
26 <sup>b</sup>	60	40	15	70	53	0.8	16	216
27 <sup>b</sup>	70	30	5	70	42	0.6	25	97
28 <sup>b</sup>	80	20	10	70	27	1.2	19	272

<sup>[a]</sup>General reaction conditions: polymerization mixture (AGE+DVB) 40%, cyclohexanol 60%.<sup>[b]</sup>Tween 80 (30% respect polymerization mixture)

**Table S2.** Pore volume distribution in poly-(AGE-*co*-DVB)-27.

<b>Radius (nm)</b>	<5	5-10	10-15	15-20	20-30	30-50	50-100	>100
Pore Volume Distribution (vol %)	3.32	4.52	5.35	5.73	9.43	20.30	50.52	17.13



**Figure S1.** Thermo gravimetric analysis of poly(AGE-co-DVB)-27.