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Table S1 ^{13}C NMR chemical shifts of poly(4MP) and assignments.

Peak	Branched units	Assignment	Chemical shift (ppm)		Ref.
			This work	Literatures	
1	**C, D**	C5, D1	19.9	19.70,19.9	[2],[3]
2	**A, B**	A1, A2, B1, B2	20.5	19.5-20.07	[4]
3	**C**	C1	20.7	20.1, 20.2-20.6	[2], [4]
4	**E**	E4	21.4	21.4	[9]
5	**G**	G1	22.7	22.4	[2]
6	**E**	E1	23.0-23.2	23.5	[2]
7	**J**	J1	23.6	23.21, 25.65, 23.5	[2], [4] , [8]
8	**J**	J2	25.8	26.75, 25.8	[2], [8]
9	**E**	E2	25.9	25.8	[2]
10	**C, G**	C7, G5,	27.3	27.0, 27.24	[2], [4]
11	**D, G**	D4, G2	27.8	28.0, 27.2,	[2-4]
12	**G, B, C**	G4, B5, C2	28.2	28.1, 27.97	[2] [4]
13	**A**	A4	28.6	27.97	[4]
14	**C, D**	C4, D2	30.8	30.6, 30.38	[2], [8]
15	**F**	F1	31.6	31.29	[4]
16	**A, B**	A3, B3	33.2	33.38	[4]
17	**H, I, J**	I1, H1, J4	33.5	31.5,33.62	[2], [5-7]
18	**G**	G6	35.7	34.7	[2]
19	**D, G**	D3, G7	37.5	37.5, 37.6, 37.45,	[2-4]
20	**C**	C6	38.2	37.77	[4]
21	**F**	F2	38.5	38.87	[5-7]
22	**G**	G3	39.4	39.2	[2]
23	**H**	H2	41.8-42.7	39-42	[1]
24	**I**	I2	43.4-44.1	42-44	[1]
25	**J**	J3	45.1	45.5	[2]
26	**C**	C3	45.3-45.4	46.2	[2]
27	**A, B**	A4, B4	45.9-46.1	45.0-47.5	[4]
28	**E**	E3	46.7-48.2	47.0-48.0	[2]

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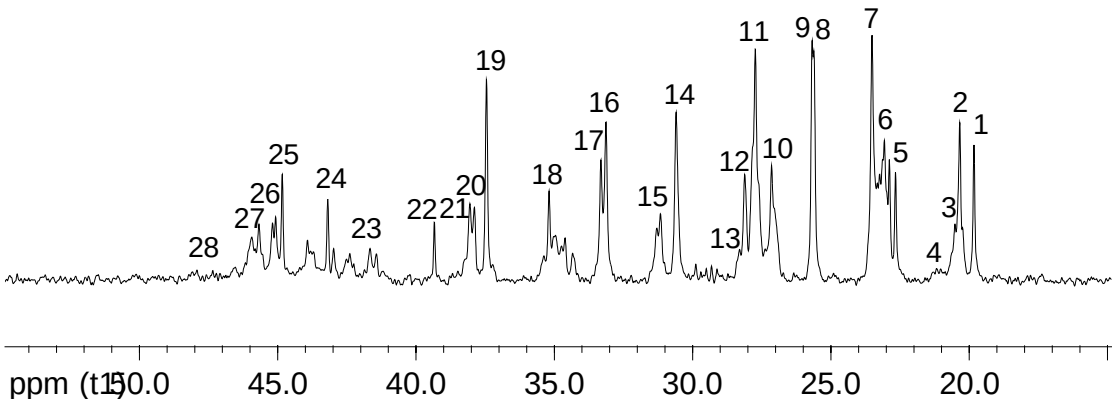
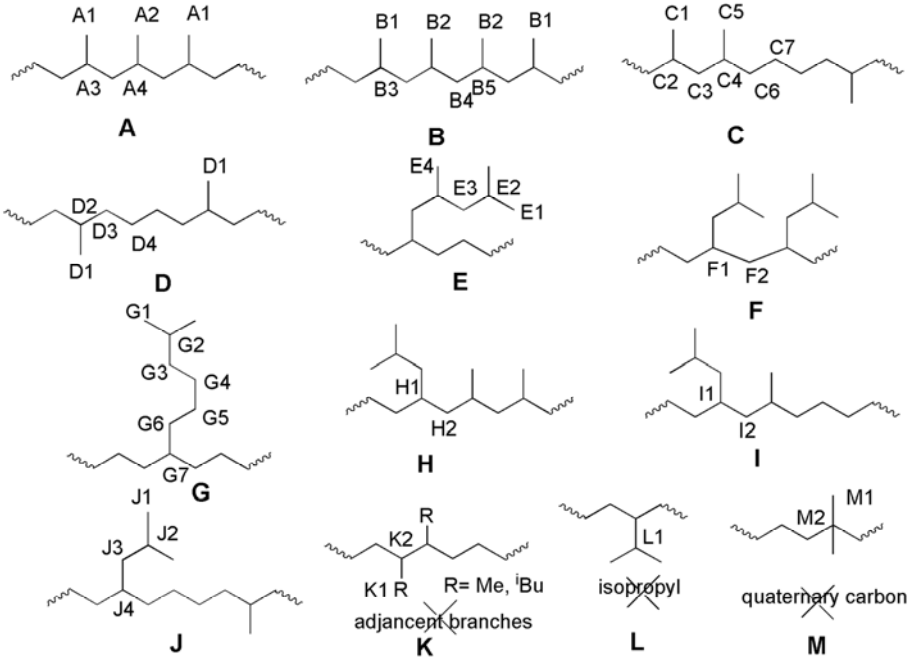


Fig. S1. ^{13}C NMR spectrum of poly(4MP) prepared by **C1**/DEACat 20 °C.

Branched units



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