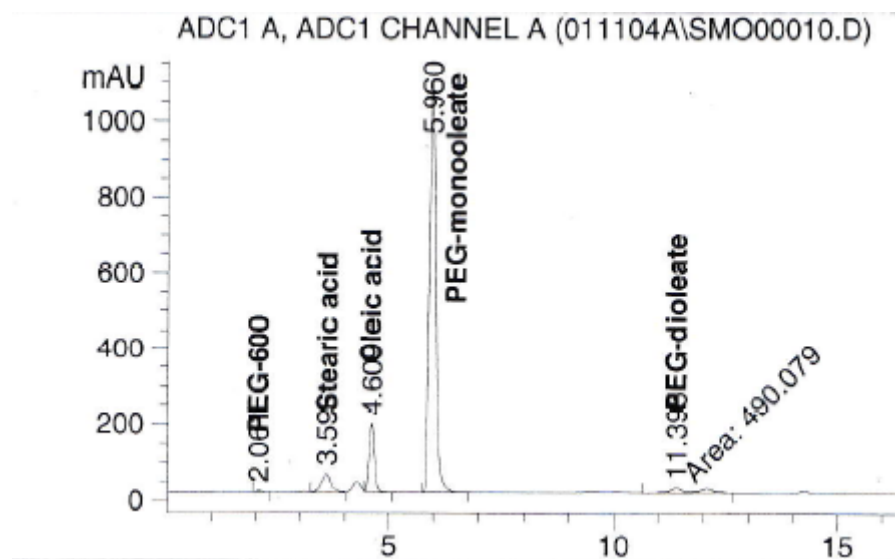


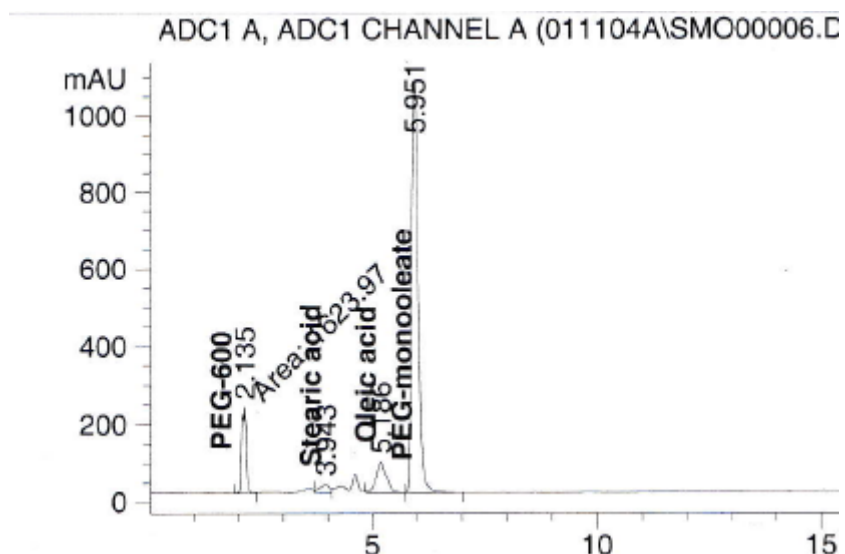
SUPPLEMENTARY MATERIAL



Signal 1: ADC1 A, ADC1 CHANNEL A

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.061	PB	0.1035	32.26198	4.50529	0.2379
2	3.596	VV	0.2100	690.95465	47.12962	5.0949
3	4.609	VB	0.1324	1501.83264	178.14771	11.0741
4	5.960	PB	0.1522	1.08465e4	1079.38110	79.9794
5	11.395	MM	0.6981	490.07867	11.70094	3.6137

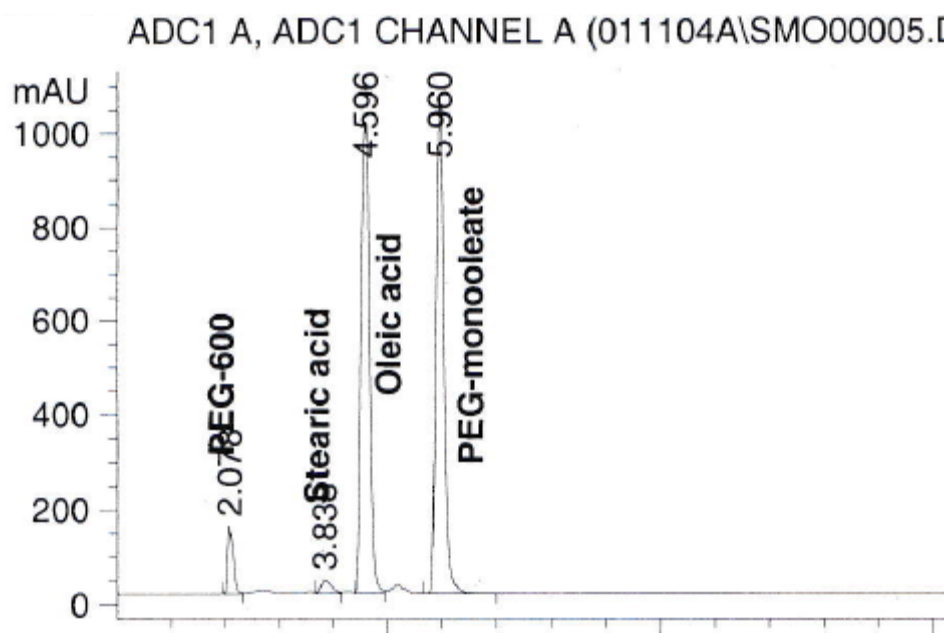
Figure 1S. Esterification of oleic acid and PEG-600 (mole ratio 1:1) catalyzed by *p*-TSA at 1 hours



Signal 1: ADC1 A, ADC1 CHANNEL A

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.135	MM	0.1218	1623.97278	222.15465	11.6265
2	3.943	VV	0.2068	325.78384	22.12674	2.3324
3	5.186	VV	0.2129	1250.44739	80.19859	8.9523
4	5.951	VB	0.1573	1.07676e4	1062.06738	77.0887

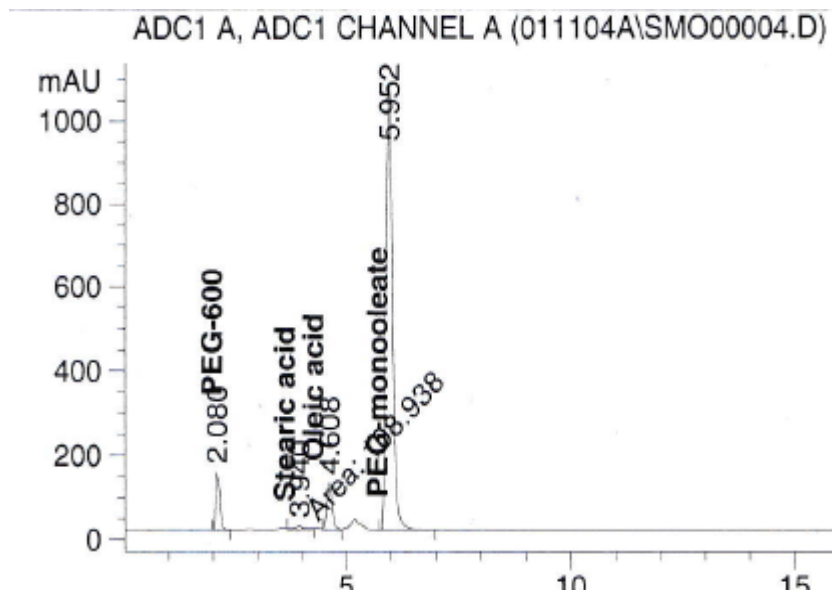
Figure 2S. Esterification of oleic acid and PEG-600 (mole ratio 1:1) catalyzed by Cs 1.87 HPA at 1 hour



Signal 1: ADC1 A, ADC1 CHANNEL A

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.078	PV	0.0947	949.25488	142.60722	4.2402
2	3.838	VV	0.1840	391.24774	27.83955	1.7476
3	4.596	VV	0.1662	1.02283e4	1001.25439	45.6884
4	5.960	VB	0.1536	1.08183e4	1055.31763	48.3238

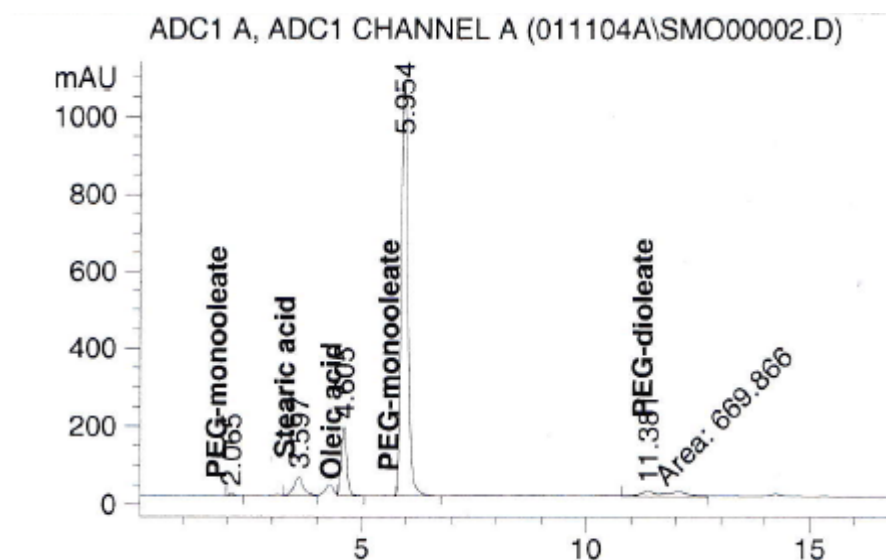
Figure 3S. Esterification of oleic acid and PEG-600 (mole ratio 1:4) catalyzed by Cs 2.50 HPA at 1 hour



Signal 1: ADC1 A, ADC1 CHANNEL A

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.080	BV	0.0911	891.34802	136.67090	7.0083
2	3.940	MM	0.2726	108.93827	6.66151	0.8565
3	4.608	VV	0.1284	934.64014	110.80432	7.3487
4	5.952	BB	0.1557	1.07835e4	1059.93945	84.7864

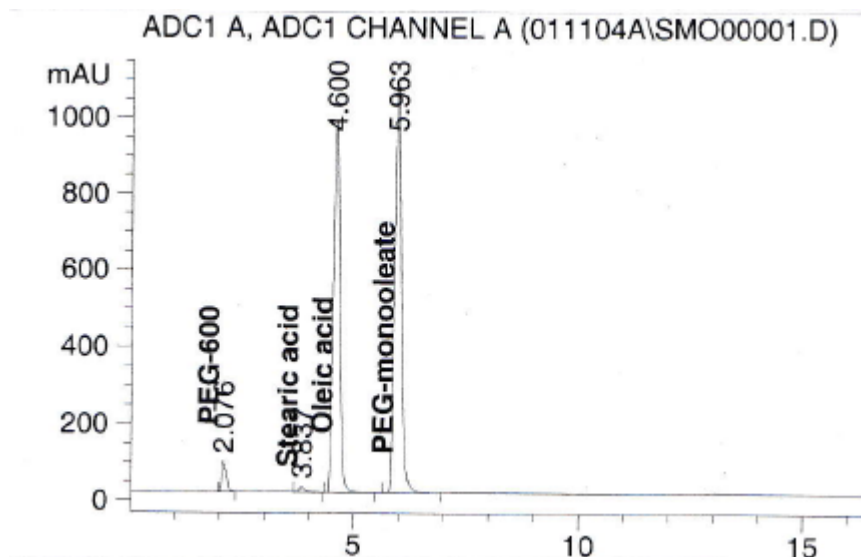
Figure 4S. Esterification of oleic acid and PEG-600 (mole ratio 1:4) catalyzed by Cs 2.50 HPA at 24 hours



Signal 1: ADC1 A, ADC1 CHANNEL A

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.065	BB	0.1078	30.88853	4.05684	0.2246
2	3.597	VV	0.2089	691.00250	47.45383	5.0250
3	4.605	VB	0.1313	1494.92346	173.96391	10.8711
4	5.954	PB	0.1542	1.08647e4	1063.79858	79.0080
5	11.381	MM	0.8516	669.86597	13.10982	4.8713

Figure 5S. Esterification of oleic acid and PEG-600 (mole ratio 1:1) catalyzed by Cs 2.50 HPA at 24 hours



Signal 1: ADC1 A, ADC1 CHANNEL A

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	2.076	PV	0.0948	544.22736	79.52721	2.5154
2	3.837	VB	0.1390	122.13893	12.61451	0.5645
3	4.600	BB	0.1655	9829.70313	967.98956	45.4317
4	5.963	BB	0.1588	1.11401e4	1075.85120	51.4884

Figure 6S. Esterification of oleic acid and PEG-600 (mole ratio 1:1) control reaction at 24 hours