Supporting Information for: Ring-opening mechanism of epoxides with alcohol and tertiary amine

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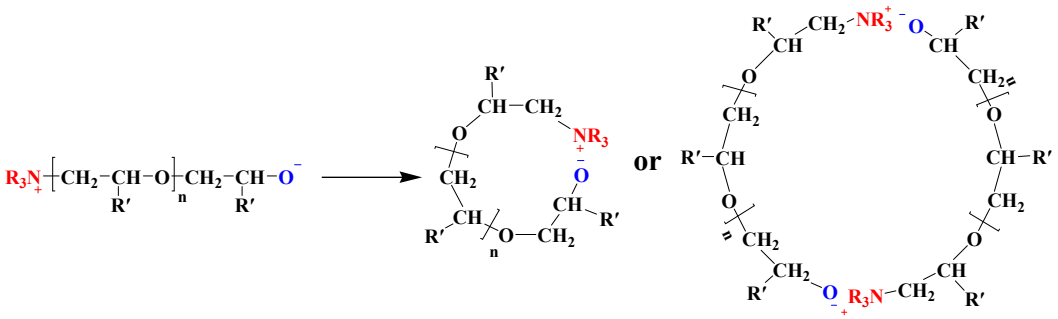

Scheme S1. Scheme for the formation of macro-cyclic with different macromolecules through intramolecular ion pair or intermolecular ion pair.

Table S1. Results of ring-opening polymerization of epoxide.

Run	$[Epoxide]_0/[Alcohol]_0/[Tertiary\ amine]_0$	Temp. (°C)	*t* (h)	*Conv.* $_{Epoxide}$ [a] (%)
S1	$[SO]_{50}/[TEA]_1$	25	72	0
S2	$[AGE]_{50}/[TEA]_1$	25	72	0
S3	$[GPE]_{50}/[TEA]_1$	25	72	0
S4	$[ECH]_{50}/[TEA]_1$	25	72	0

[a] **Measured by GC.**

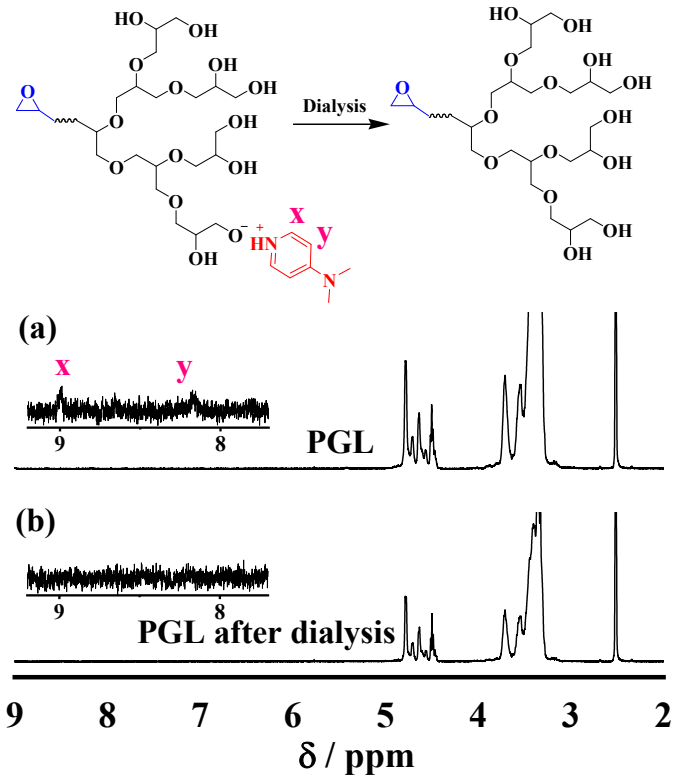

Figure S1. The possible structures and ^{1}H-NMR spectra of PGL before (a) and after dialysis (b) from GL/DMAP.

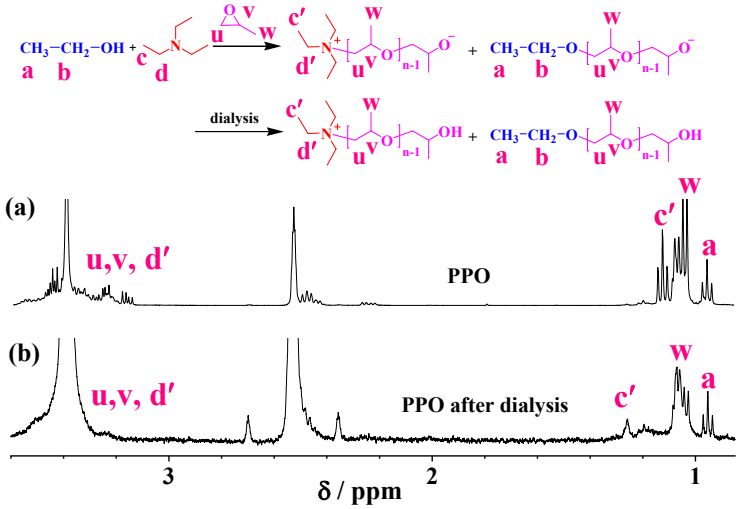

Figure S2. The possible structures and ^{1}H-NMR spectra of PPO before (a) and after dialysis (b) from PO/TEA/EtOH.

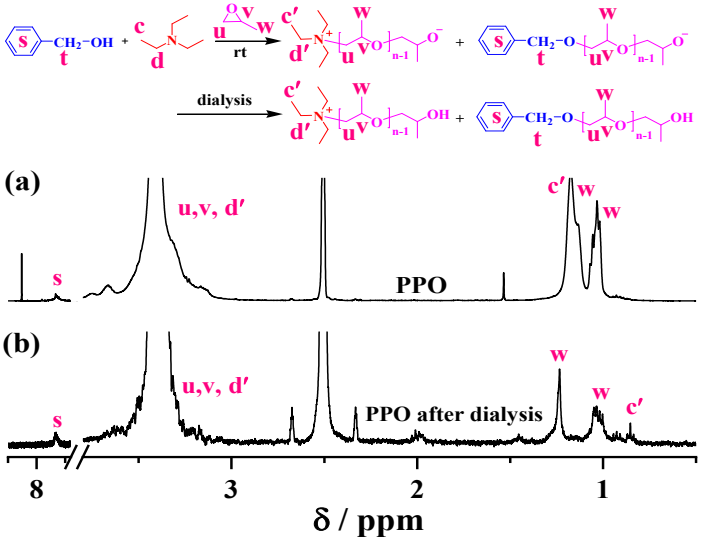

Figure S3. The possible structures and ^{1}H-NMR spectra of PPO before (a) and after dialysis(b) from PO/TEA/BnOH.