

Supporting Information for:

**Crosslinking of Comb-Shaped Polymer Anion Exchange Membranes Via
Thiol-ene Click Chemistry**

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This supporting information file includes: Figures S1 to S4

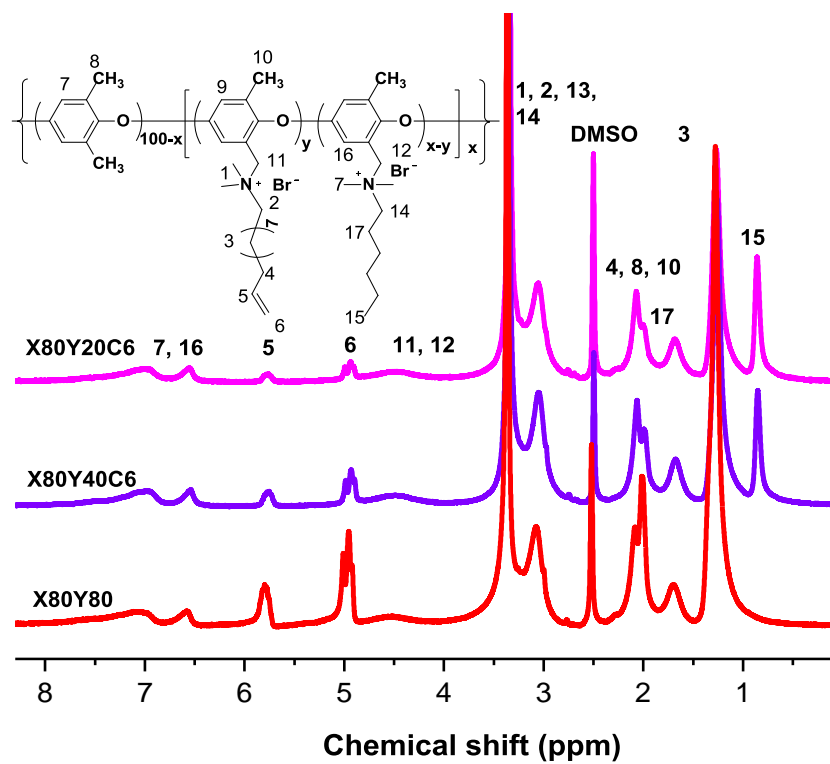


Figure S1. ^1H NMR of crosslinkable comb-shaped X80Y y in bromine salt form in $\text{DMSO-}d_6$.

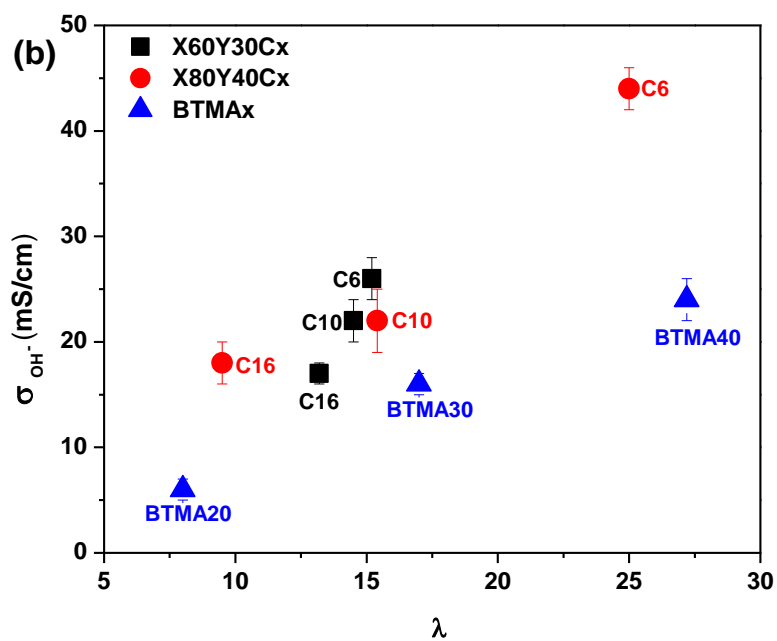
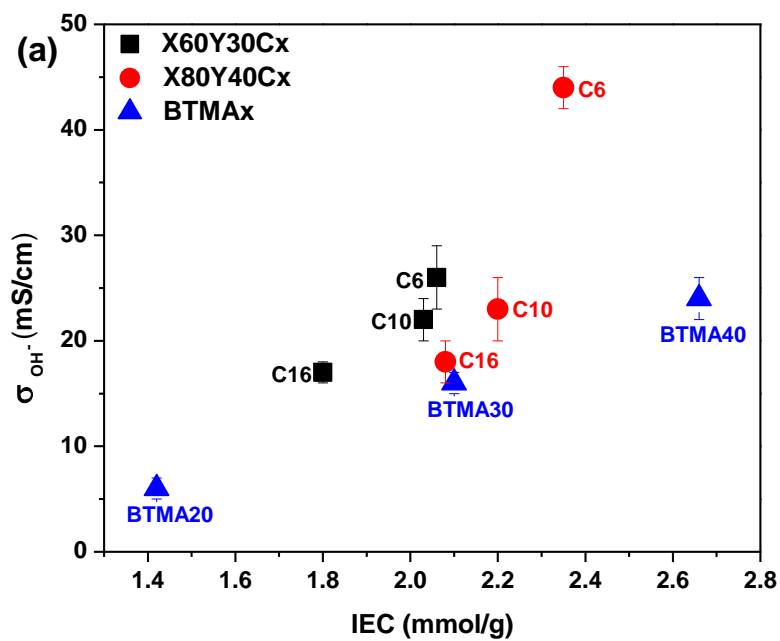


Figure S2. Hydroxide conductivity of cross-linked and BTMA membranes as a function of (a) IEC (ion exchange capacity) and (b) hydration number λ .

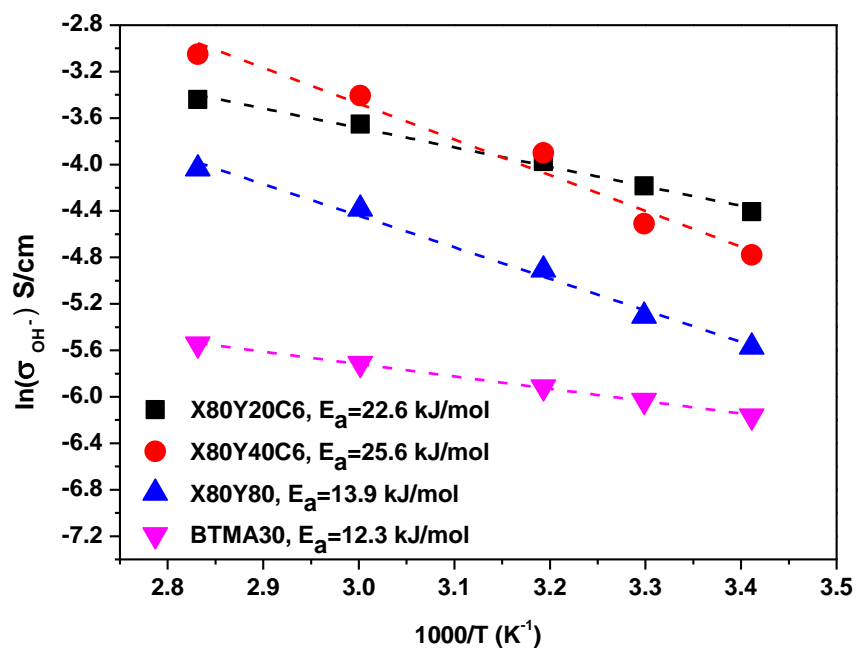


Figure S3. Bicarbonate conductivity of AEMs as a function of temperature.

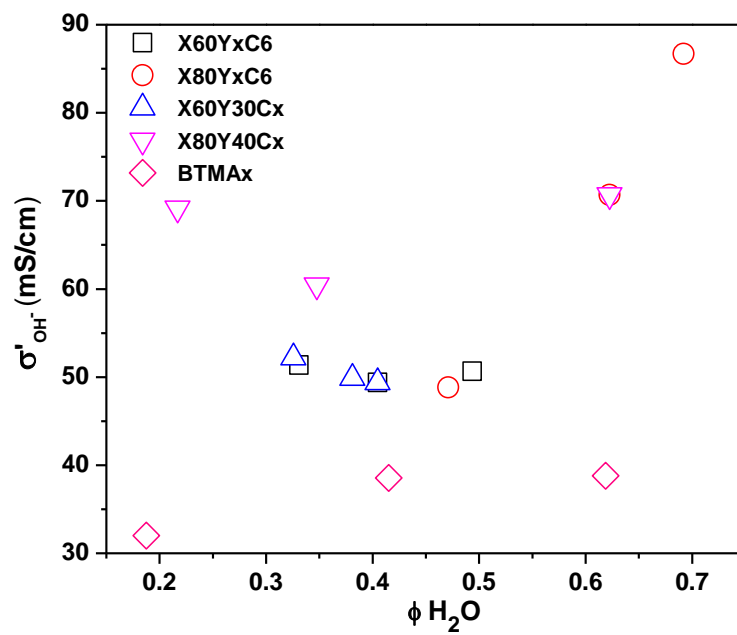


Figure S4. Water volume fraction dependence of the effective hydroxide conductivity in the water channels (σ') in water at room temperature.