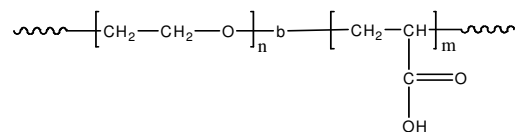


**Sample Name:** Poly(ethylene oxide-b-acrylic acid)

**Sample #:** P19606A-EOAA

**Structure:**

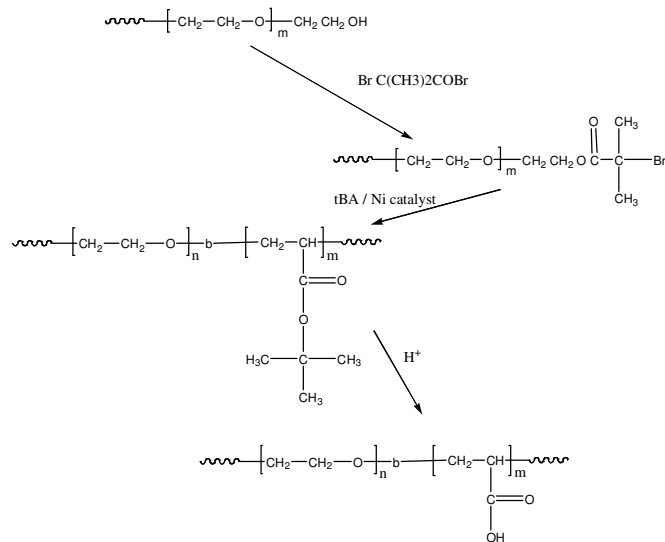


**Composition:**

Mn x 10 <sup>3</sup> PEO-b-PAA	PDI
2.0-b-10.5	1.17

**Synthesis Procedure:**

The polymer is prepared by the following scheme:



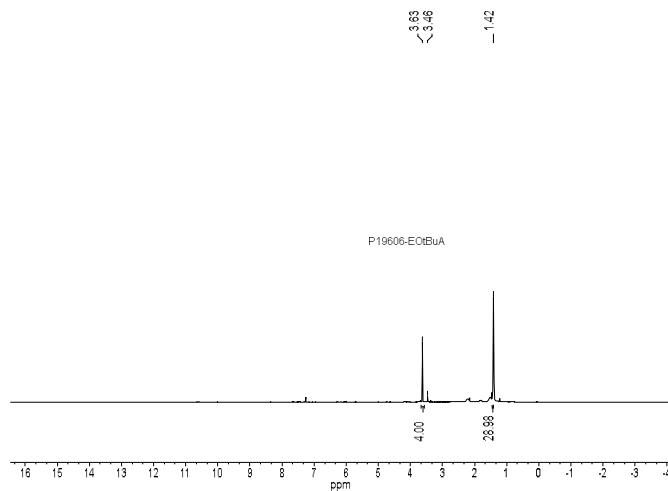
**Characterization:**

The final block copolymer composition was calculated from <sup>1</sup>H-NMR spectroscopy of poly(ethylene oxide -b- t-butyl acrylate) by comparing the peak area of the t-butyl acrylate protons at 1.43 ppm with the peak area of the ethylene oxide protons at 3.6 ppm, then transferred to the EOAA form accordingly. Copolymer PDI is determined by SEC of poly(ethylene oxide-b-t-butyl acrylate).

**Solubility:**

The polymer is soluble in CHCl<sub>3</sub>, methanol, THF and precipitated out from cold hexane or ether.

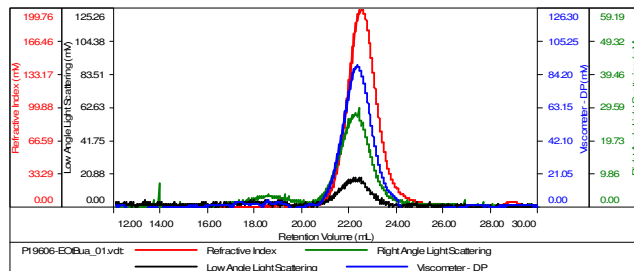
**<sup>1</sup>H-NMR Spectrum of the block copolymer before hydrolysis:**



**SEC of the block copolymer:**

**Sample ID-P19606-EOtBuA**

Concentration (mg/mL)	1.4176
Sample dn/dc (mL/g)	0.0800
Method File	PS80K-Nov-2015-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
P19606-EOtBuA_01.vdt	21,195	24,718	20,901	1.166	2.6440