

Supporting information for:

**A Simple Strategy for Efficient Preparation of Networks Based on Poly(2-isopropenyl-2-oxazoline), Poly(ethylene oxide), and Selected Biologically Active Compounds. Novel Hydrogels with Antibacterial Properties**

B. Kopka<sup>1</sup>, B. Kost<sup>1\*</sup>, K. Rajkowska<sup>2</sup>, A. Pawlak<sup>1</sup>, A. Kunicka-Styczyńska<sup>2</sup>, T. Biela<sup>1</sup>, M. Basko<sup>1\*</sup>

<sup>1</sup>Centre of Molecular and Macromolecular Studies, Polish Academy of Sciences,  
Sienkiewicza 112, 90-363 Lodz, Poland

<sup>2</sup> Institute of Fermentation Technology and Microbiology, Faculty of Biotechnology and Food Sciences, Lodz University of Technology, Wólczańska 171/173, 90-924 Lodz, Poland

\*Email: [baskomeg@cbmm.lodz.pl](mailto:baskomeg@cbmm.lodz.pl), [kost@cbmm.lodz.pl](mailto:kost@cbmm.lodz.pl),

**Table of contents:**

Figure 1S. GPC, <sup>1</sup> H NMR and <sup>13</sup> C NMR spectrum of PiPOx.....	2
Figure 2S. <sup>1</sup> H NMR of di-carboxyl poly(ethylene oxide) (HOOC-PEO-COOH).....	3
Figure 3S. SEM micrographs of the dried networks surface.....	4
Figure 4S. Calibration curve.....	5
Table 1S. Content of gel fraction.....	6

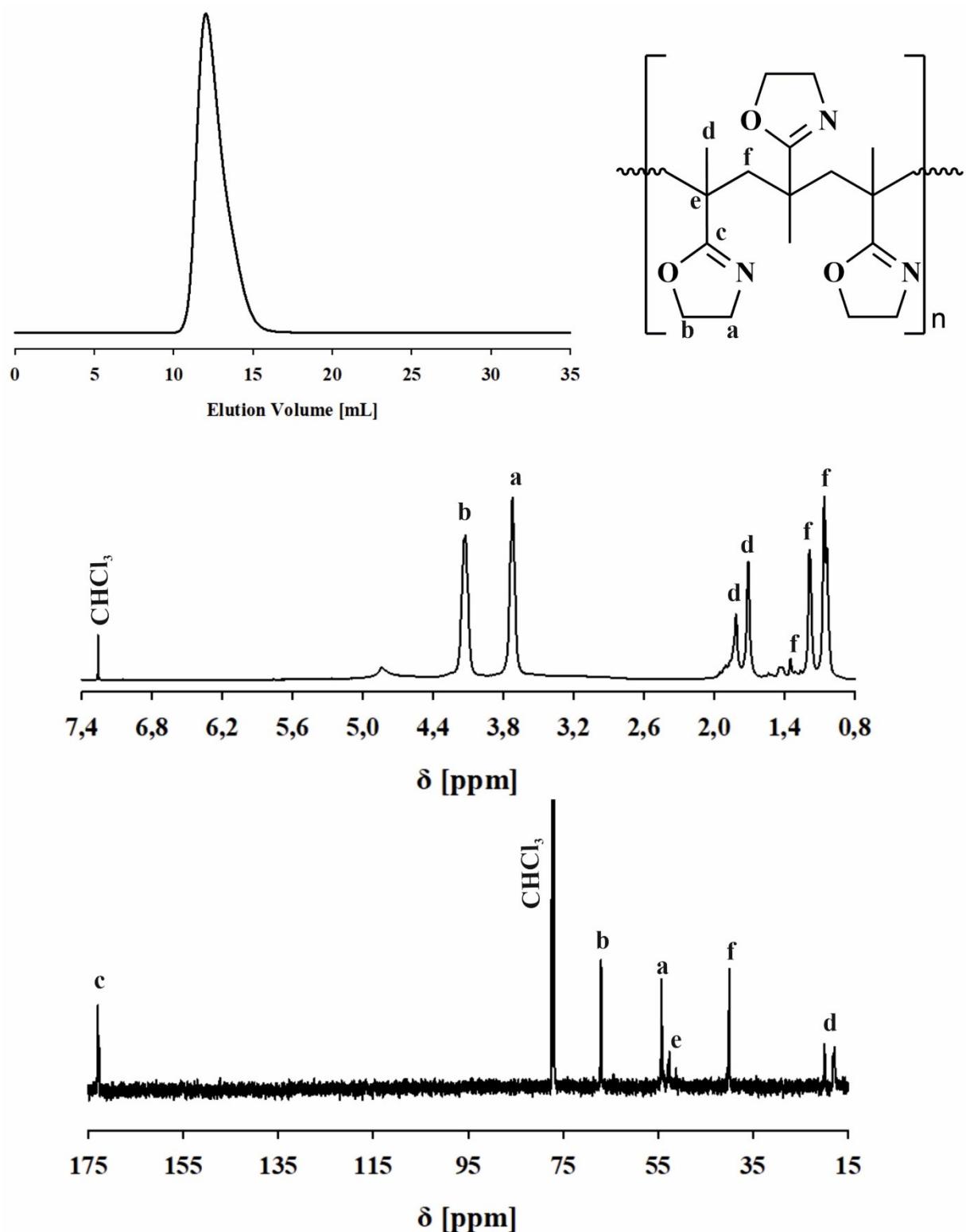


Figure 1S. GPC,  $^1\text{H}$  NMR and  $^{13}\text{C}$  NMR spectrum of PiPOx

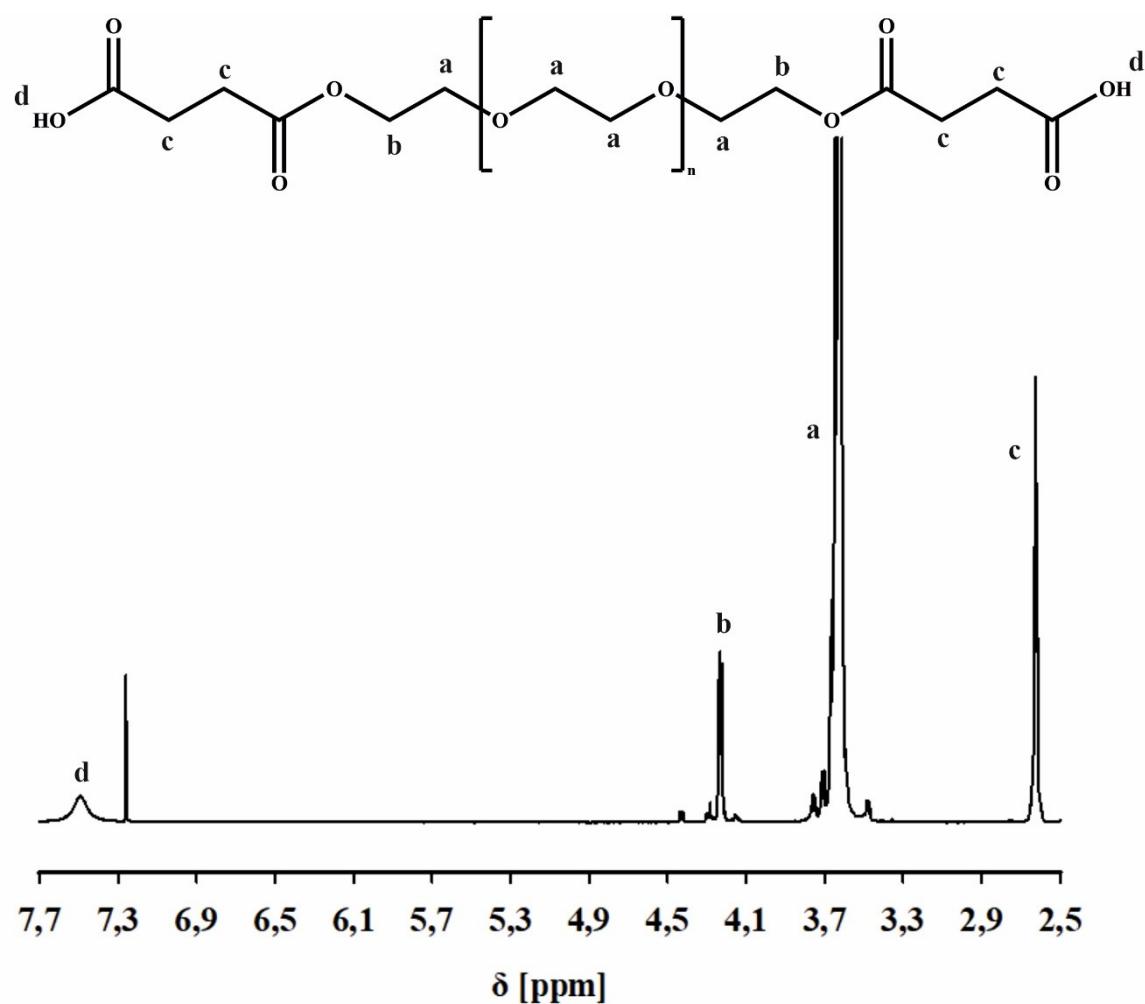


Figure 2S.  $^1\text{H}$  NMR of di-carboxyl poly(ethylene oxide) (HOOC-PEO-COOH)

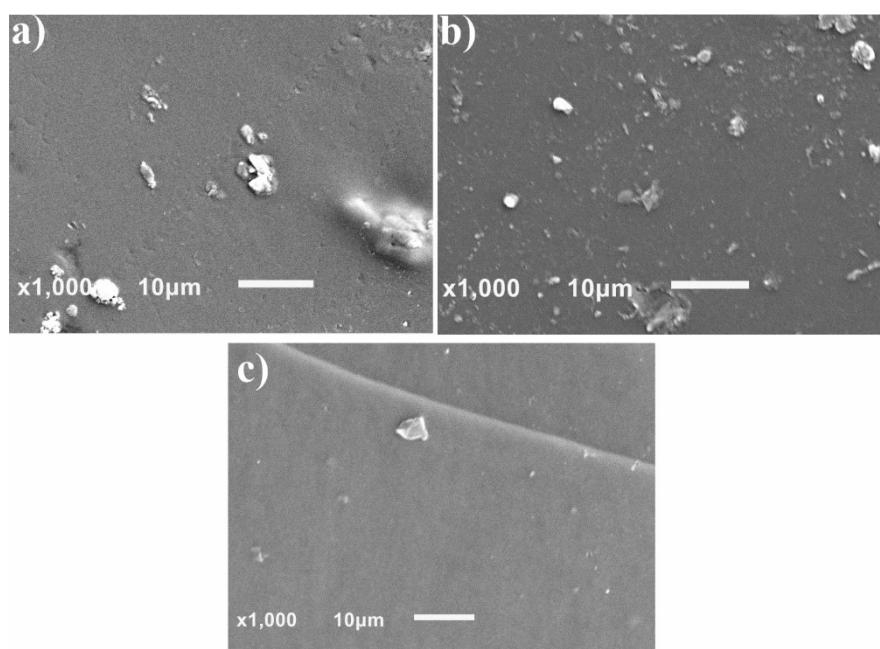


Figure 3S. SEM micrographs of the dried networks surface.

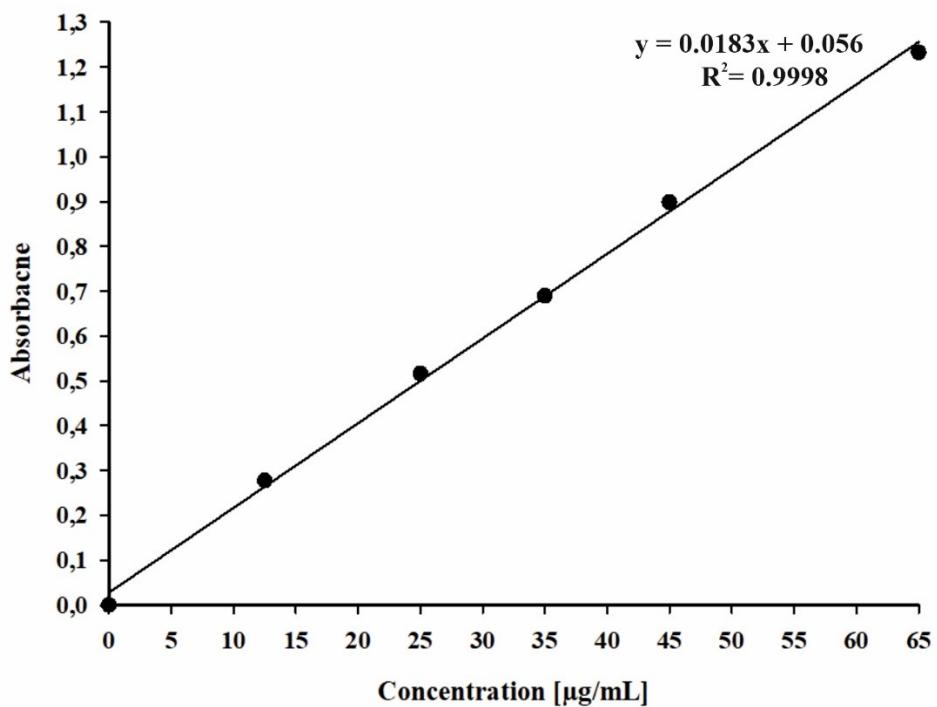


Figure 4S. Calibration curve

Table 1S. Content of gel fraction determined after extraction with dichloromethane and next, with ethanol.

Sample	$m_{\text{PiPOx}}$ [mg]	$m_{\text{PEO}}$ [mg]	$m_{\text{active compounds}}$ [mg]	$m_{\text{dried network}}$ [mg]	gel content [wt. %]
PiPOx-PEO	53	18	-----	69	97
PiPOx-PEO-CA	52	18	7	74	96
PiPOx-PEO-BA	53	18	6	73	94
PiPOx-PEO/Eu	51.5	18	7.5	69.5	90