

Article

# Permeability of Skin-Mimicking Cell Coatings by Polymers of Complex Architecture Based on Polyoxazolines

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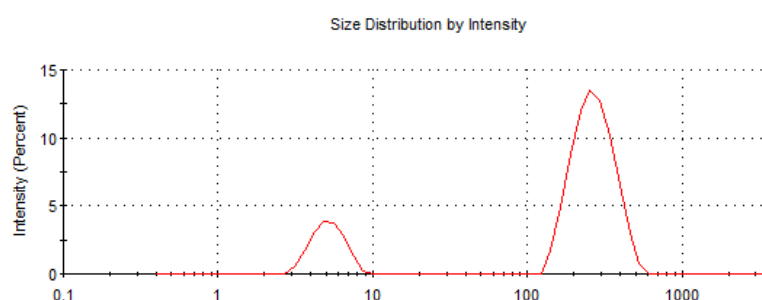


Figure S1. DLS data for 0.01% HCP A in buffer pH 6.86.

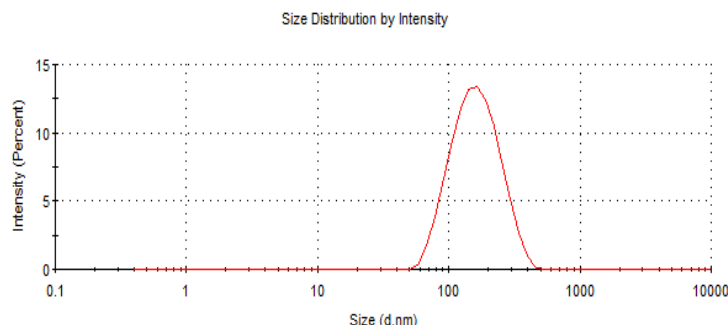


Figure S2. DLS data for 0.1% HCP A in water.

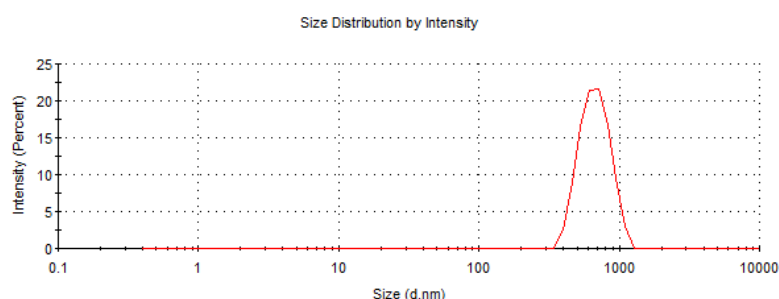


Figure S3. DLS data for 0.01% HCP B in buffer pH 6.86.

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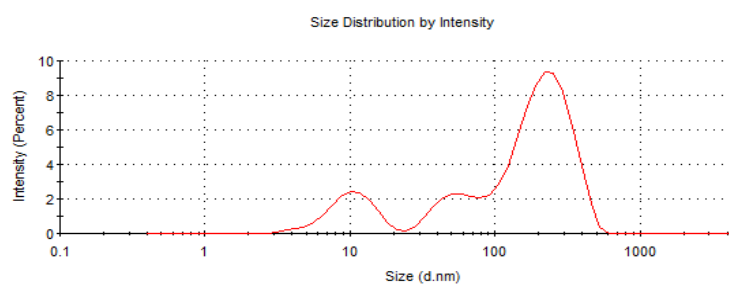
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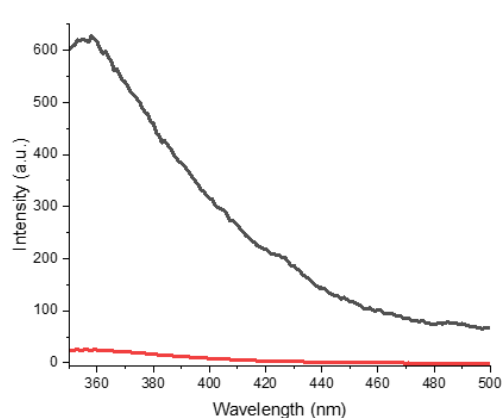
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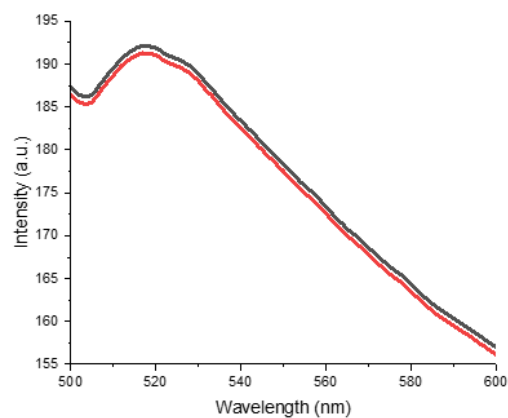
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**Figure S4.** DLS data for 0.1% HCP B in water.

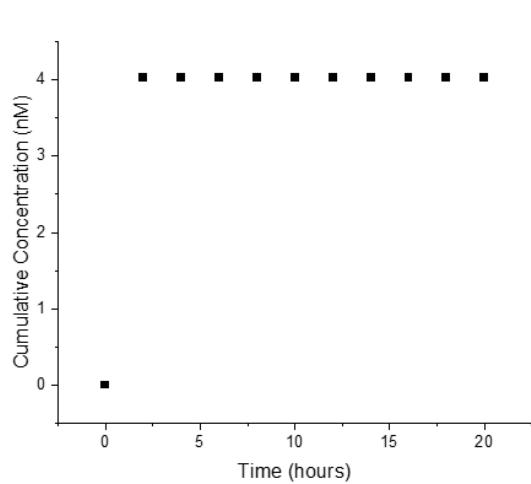


**(a)**

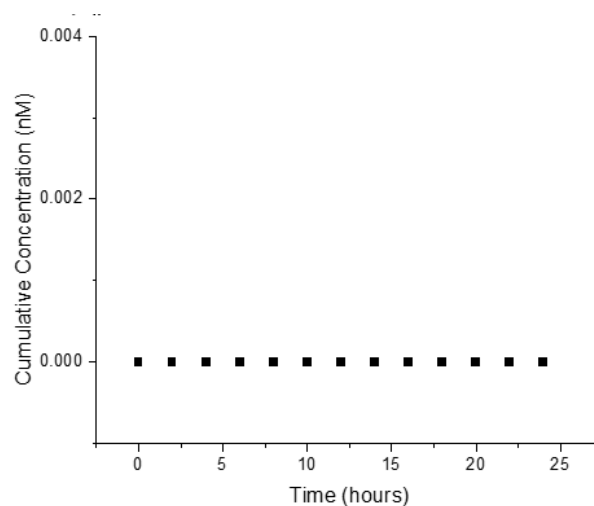


**(b)**

**Figure S5.** Emission spectra of (a) donor solution of positive control before experiment (black) and donor solution after experiment (red) (b) donor solution of negative control before experiment (black) and donor solution after experiment (red).



**(a)**



**(b)**

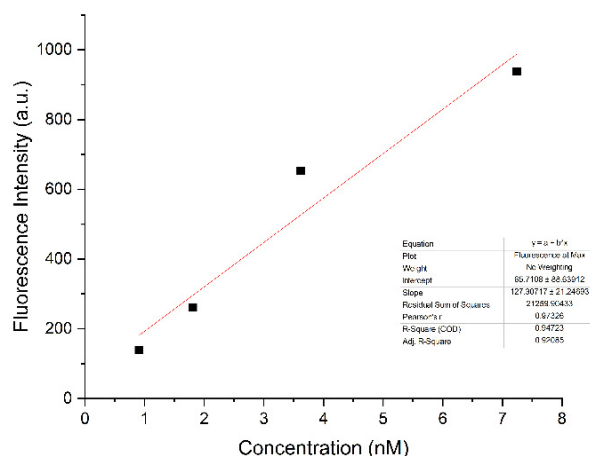
**Figure S6.** Cumulative concentration vs time of (a) positive control (b) negative control.

The equations used for the calibration are shown below.

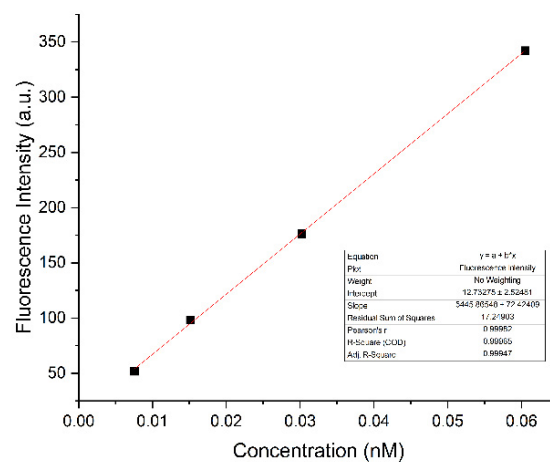
Positive Control:  $I = 127.307c + 65.7108$

Negative Control:  $I = 5445.865c + 12.7328$

where  $I$  is the fluorescence intensity and  $c$  is the concentration in mM



(a)



(b)

**Figure S7.** Calibration curve of (a) positive control salicylic acid (b) negative control fluorescein sodium.

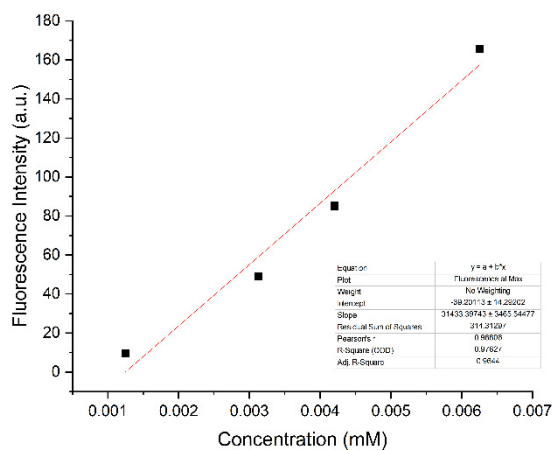
The equations obtained for each polymer studied are shown below.

Polymer A:  $I = 31433.397c - 39.201$

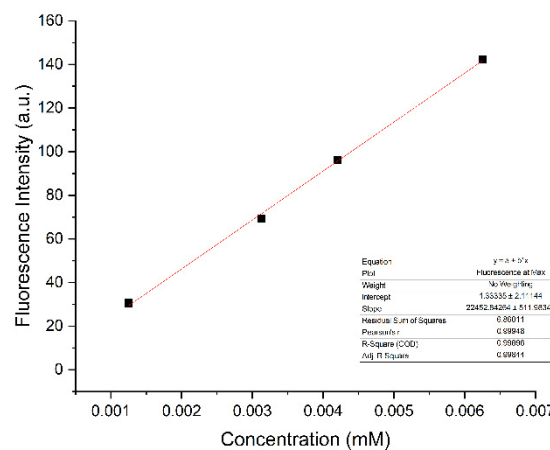
BCP A:  $I = 22452.843c + 1.3334$

HCP A:  $I = 30058.374c + 6.5707$

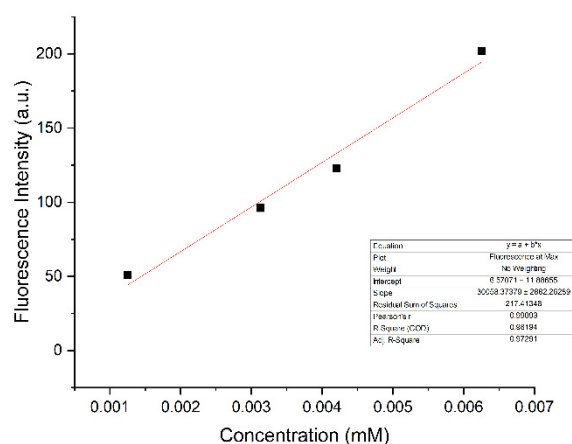
where  $I$  is the fluorescence intensity and  $c$  is the concentration in nM



(a)



(b)



(c)

**Figure S8.** Calibration curve of FITC-aminothiophenol-functionalized (a) homopolymers (b) BCPs (c) HCPs.

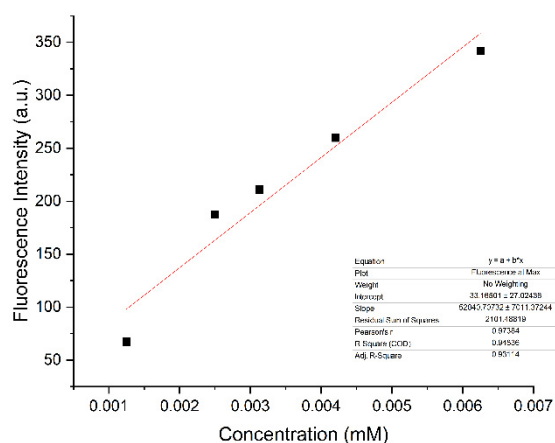
A calibration of the FITC-cysteamine-functionalized homopolymer, BCP, and HCP was obtained. The equations obtained for each polymer studied are shown below:

Polymer B:  $I = 52049.707c + 33.165$

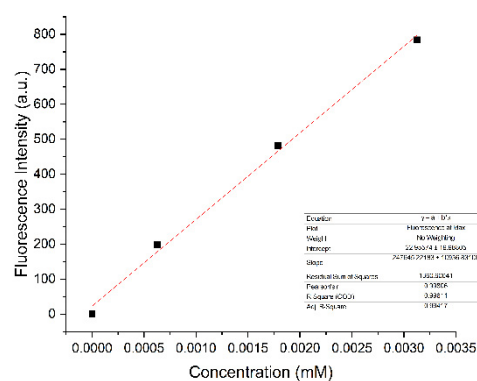
BCP B:  $I = 24765.222c + 22.956$

HCP B:  $I = 147278.151c - 111.596$

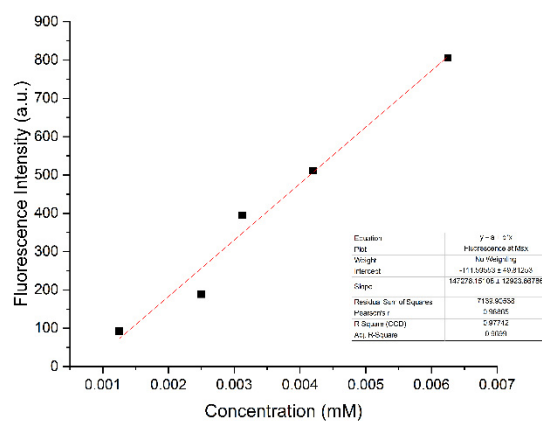
where  $I$  is the fluorescence intensity and  $c$  is the concentration in mM



(a)



(b)



(c)

**Figure S9.** Calibration curve of FITC-cysteamine-functionalized (a) homopolymers (b) BCPs (c) HCPs.