SUPPORTING INFORMATION

for

"IMMOBILIZATION OF BIOMOLECULES ON SURFACE OF ELECTROSPUN POLYCAPROLACTONE FIBROUS SCAFFOLDS FOR TISSUE ENGINEERING"

Waradda Mattanavee,¹ Orawan Suwantong,² Songchan Puthong,³ Tanom Bunaprasert,⁴ Voravee P. Hoven,^{5,*} and Pitt Supaphol ^{2,*}

¹ Program of Petrochemistry and Polymer Science, Faculty of Science, Chulalongkorn University, Bangkok 10330, Thailand

² The Petroleum and Petrochemical College and The Center for Petroleum, Petrochemicals and Advanced Materials (C-PPAM), Chulalongkorn University, Bangkok 10330, Thailand

³ The Institute of Biotechnology and Genetic Engineering, Chulalongkorn University, Bangkok 10330, Thailand

⁴ Department of Otolaryngology Head and Neck Surgery, Faculty of Medicine, Chulalongkorn University, Bangkok 10330, Thailand

⁵ Organic Synthesis Research Unit, Department of Chemistry, Faculty of Science, Chulalongkorn University, Bangkok 10330, Thailand

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^{*} Authors to whom correspondence should be addressed: pitt.s@chula.ac.th (P. Supaphol), vipavee.p@chula.ac.th (V. P. Hoven)

Additional Experimental Detail:

3-(4,5-Dimethylthiazol-2-yl)-2,5-diphenyl-tetrazolium bromide (MTT) assay. The MTT assay is based on the reduction of yellow tetrazolium salt to purple formazan crystals by dehydrogenase enzymes secreted from the mitochondria of metabolically active cells. The amount of the purple formazan crystal is proportional to the number of viable cells. At a given time point, the culture medium in each well was removed to discard the unattached cells and 0.2 mL of each respective culture medium was pipetted into each well, followed by the addition of 10 μ L of 5 mg/mL MTT/normal saline solution. After incubation for 4 h, the supernatant solution was removed and 150 μ L of dimethylsulfoxide was pipetted into each well to dissolve the purple formazan crystals. Next, 25 μ L of 0.1 M glycine (pH 10.5) was added. The optical density of each sample solution, representing the viability of the cells, was measured using a Titertek Multiskan MCC/340 MK II ELISA reader at a wavelength of 540 nm.



Figure I. Calibration curve detailing the relationship between the UV absorbance of 1,6hexymethylene diamine (HMD) as a function of its concentration as analyzed by ninhydrin.

Table I. SEM images (magnification = 500x, scale bar = 50 μ m) of cells that had been cultured onthe surfaces of modified PCL fibrous scaffolds for 12 h, 2 d, or 4 d, respectively.

Type of cells	Samples	Culturing time		
. , , , , , , , , , , , , , , , , , , ,		12 h	2 d	4 d
1020	TCPS	S C A C C C C C C C C C C C C C C C C C		
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	COLI-PCL			
	COLIV-PCL			
	GRGDS-PCL			
HEK001	TCPS	1540 X560	С С 19. ч холо - 19. ч холо 	Con year - and a second
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	Aminolyzed PCL			and the Contract of the second of the

	COLI-PCL			and the second sec
	COLM-PCL	A LEVY SALE		
	COLIV-PCL			
	CS15-PCL			
	CS83-PCL			
	GRGDS-PCL			
MC3T3-E1	TCPS		Code has to some strong	
	Neat PCL		had a man	
	Aminolyzed PCL			
	COLI-PCL			

COLM-PCL		
COLIV-PCL		
CS15-PCL	NA I	
CS83-PCL		
GRGDS-PCL		

Type of cells	Samples	Culturing time		
		12 h	2 d	4 d
1.020	TCPS			
	Neat PCL			
	Aminolyzed PCL			
	COLI-PCL			
	COLIV-PCL			
	GRGDS-PCL			
HEK001	TCPS			
	Neat PCL			
	Aminolyzed PCL			

Table II. SEM images (magnification = 1500-3500x, scale bar = 5-10 μ m) of cells that had been cultured on the surfaces of modified PCL fibrous scaffolds for 12 h, 2 d, or 4 d, respectively.

	COLI-PCL		
	COLM-PCL		
	COLIV-PCL		
	CS15-PCL		
	CS83-PCL		
	GRGDS-PCL		
MC3T3-E1	TCPS	Jan - man	
	Neat PCL		
	Aminolyzed PCL		
	COLI-PCL		

COLM-PCL		
COLIV-PCL		
CS15-PCL		
CS83-PCL		
GRGDS-PCL	0	