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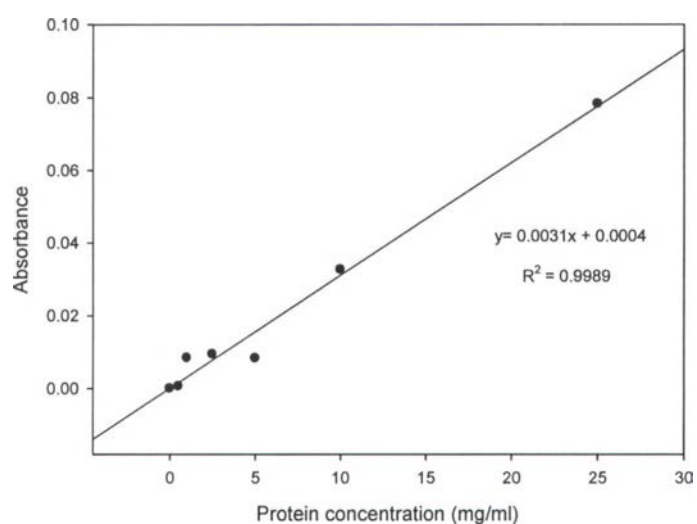
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## APPENDICES

## Appendix A Protein Adsorption

**Table A1** The absorbance of Bovine Serum Albumin in PBS of known concentration solution

Sample	Concentration	Average Absorbance
1	25	0.0783
2	10	0.0326
3	5	0.0083
4	2.5	0.0094
5	1	0.0084
6	0.5	00006

**Figure A1** The calibration curve obtained with BSA/PBC solution of known concentration.

**Table A2** Adsorbed Protein per surface of scaffold

<b>Sample</b>	<b>Concentration (<math>\mu\text{g}/\text{cm}^3</math>)</b>
PCL	$0.027 \pm 0.01$
PCL/10PHBV	$0.029 \pm 0.01$
PCL/20PHBV	$0.031 \pm 0.01$
PCL/30PHBV	$0.031 \pm 0.01$
PCL/40PHBV	$0.031 \pm 0.01$
PCL/50PHBV	$0.035 \pm 0.01$
PHBV	$0.033 \pm 0.02$

## Appendix B Experimental Data of Biological Characterizations

**Table B1** Raw data of indirect cytotoxicity test of all types of uncoated and coated film mats, determined the viability of cells by MTT assay method at 570 nm

Sample	1 day	2 days	3 days
TCPS	100 ± 1	100 ± 0	93 ± 1
Uncoated-PCL	88 ± 2	83 ± 2	89 ± 3
Uncoated- PCL/10PHBV	82 ± 3	82 ± 5	85 ± 2
Uncoated- PCL/20PHBV	88 ± 1	87 ± 2	86 ± 6
Uncoated- PCL/30PHBV	92 ± 0	92 ± 1	87 ± 7
Uncoated- PCL/40PHBV	93 ± 2	95 ± 1	88 ± 3
Uncoated- PCL/50PHBV	87 ± 7	95 ± 10	91 ± 0
Uncoated-PHBV	88 ± 6	81 ± 9	83 ± 1
Coated-PCL	85 ± 4	97 ± 5	88 ± 3
Coated-PCL/10PHBV	90 ± 2	93 ± 1	81 ± 2
Coated-PCL/20PHBV	97 ± 1	93 ± 3	82 ± 4
Coated-PCL/30PHBV	99 ± 1	97 ± 2	88 ± 1

Coated-PCL/40PHBV	94 ± 0	95 ± 3	89 ± 1
Coated-PCL/50PHBV	92 ± 3	96 ± 2	90 ± 3
Coated-PHBV	91 ± 3	96 ± 5	83 ± 7

**Table B2** Raw data of cell attachment of MC3T3-E1 onto all types of uncoated film mats at 6 and 16 hours, determined the viability of cells by MTT assay method at 570 nm.

Sample	4 hours	16 hours
TCPS	71 ± 4	93 ± 0
Uncoated-PCL	43 ± 9	39 ± 3
Uncoated-PCL/10PHBV	39 ± 6	40 ± 0
Uncoated-PCL/20PHBV	40 ± 0	42 ± 1
Uncoated-PCL/30PHBV	42 ± 2	43 ± 1
Uncoated-PCL/40PHBV	42 ± 5	43 ± 1
Uncoated-PCL/50PHBV	43 ± 6	47 ± 3



Uncoated-PHBV	42 ± 1	41 ± 4
Coated-PCL	72 ± 2	72 ± 1
Coated-PCL/10PHBV	68 ± 3	70 ± 6
Coated-PCL/20PHBV	69 ± 4	81 ± 6
Coated-PCL/30PHBV	70 ± 2	84 ± 4
Coated-PCL/40PHBV	72 ± 1	84 ± 1
Coated-PCL/50PHBV	73 ± 3	87 ± 4
Coated-PHBV	75 ± 3	73 ± 3

**Table B3** Raw data of cell proliferation of MC3T3-E1 onto all types of uncoated film mats at 1, 2, and 3 days, determined the viability of cells by MTT assay method at 570 nm.

Sample	1 day	2 days	3 days
TCPS	100 ± 1	105 ± 3	117 ± 9
Uncoated-PCL	57 ± 6	74 ± 13	78 ± 6
Uncoated-PCL/10PHBV	61 ± 9	81 ± 13	88 ± 0

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Uncoated- PCL/20PHBV	$61 \pm 14$	$83 \pm 17$	$92 \pm 3$
Uncoated- PCL/30PHBV	$69 \pm 11$	$83 \pm 17$	$98 \pm 14$
Uncoated- PCL/40PHBV	$73 \pm 1$	$88 \pm 0$	$102 \pm 1$
Uncoated- PCL/50PHBV	$78 \pm 7$	$91 \pm 1$	$112 \pm 5$
Uncoated-PHBV	$60 \pm 3$	$77 \pm 5$	$81 \pm 1$
Coated-PCL	$80 \pm 11$	$134 \pm 1$	$155 \pm 20$
Coated-PCL/10PHBV	$85 \pm 14$	$149 \pm 4$	$171 \pm 14$
Coated-PCL/20PHBV	$86 \pm 8$	$153 \pm 4$	$178 \pm 10$
Coated-PCL/30PHBV	$86 \pm 11$	$157 \pm 15$	$185 \pm 9$
Coated-PCL/40PHBV	$86 \pm 3$	$163 \pm 8$	$188 \pm 13$
Coated-PCL/50PHBV	$140 \pm 4$	$243 \pm 18$	$263 \pm 11$
Coated-PHBV	$82 \pm 12$	$149 \pm 5$	$166 \pm 10$

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## CURRICULUM VITAE

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**Presentations:**

1. Sirisinha, R.; and Supaphol, P. (2012, March 25-29) Effect of blend compositions on physical and physico-chemistry of solvent-cast polycaprolactone/poly(3-hydroxybutyrate-co-3-hydroxyvalerate) blend films. Paper presented at the 243<sup>rd</sup> ACS National Meeting 2012, San Diego, CA, USA.