

RESEARCH ARTICLE

Analysis of Stiffness Change of Panc-1 Cells Pre/Post Epithelial-mesenchymal Transition Induced by TGF-β

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Table S1. Primers of real-time PCR.

Gene Name	Primer name	Primer sequence (5'—3')
GAPDH	GAPDH -F	CATGAGAAGTTGACAACAGCCT
	GAPDH -R	AGTCCTTCCACGATACCAAAGT
Vimentin	Vimentin-F	GACGCCATCAACACCGAGTT
	Vimentin-R	CTTTGTCGTTGGTTAGCTGGT
E-cadherin	E-cadherin-F	TTTTTCCCTCGACACCCGATA
	E-cadherin-R	TCCCAGGCGTAGACCAAGA
alpha-SMA	alpha-SMA-F	GTGTTGCCCTGAAGAGCAT
	alpha-SMA-R	GCTGGGACATTGAAAGTCTCA
Cytokeratin	Cytokeratin-F	TCGCAAATACTGTGGACAATGC
	Cytokeratin-R	GCAGTCGTGTGATATTGGTGT
Actin	Actin-F	CCCGAGCTGATTGACTACGG
	Actin-R	GCAGTTCCAACGATGTCTTCG
Tubulin	Tubulin-F	CATGAGAAGTTGACAACAGCCT
	Tubulin-R	AGTCCTTCCACGATACCAAAGT
Lamin A	Lamin A-F	CCCGCAAGACCCTTGACTC
	Lamin A-R	CCTTAAACTCCTCACGCACTTT

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Table S2. Fatty acid methyl esters and the deuterium-labeled internal standard.

S. NO	Abbreviation	Common Name	Fatty acid
1	C4:0	Butyric acid	Butyric acid
2	C6:0	Caproic acid	Caproic acid
3	C8:0	Caprylic acid	Caprylic acid
4	C10:0	Capric acid	Capric acid
5	C11:0	Undecanoic acid	Undecanoic acid
6	C12:0	Lauric acid	Lauric acid
7	C13:0	Tridecanoic acid	Tridecanoic acid
8	C14:0	Myristic acid	Myristic acid
9	C14:1	Myristoleic acid	<i>Cis</i> -9-tetradecenoic acid
10	C15:0	Pentadecanoic acid	Pentadecanoic acid
11	C15:1		<i>Cis</i> -10-Pentadecenoic acid
12	C16:0	Palmitic acid	Hexadecanoic acid
13	C16:1	Palmitoleic acid	<i>Cis</i> -9-Hexadecenoic acid
14	C17:0	Heptadecanoic acid	Heptadecanoic acid
15	C17:1		<i>Cis</i> -10-Heptadecenoic acid
16	C18:0	Stearic acid	Octadecanoic acid
17	C18:1n9t	Elaidic acid	Trans-9-Octadecenoic acid
18	C18:1n9c	Oleic acid	<i>Cis</i> -9-Octadecenoic acid
19	C18:2n6t	Linolelaidic acid	Trans-9,12-Octadecenoic acid
20	C18:2n6c	Linoleic acid	<i>Cis</i> -9,12-Octadecenoic acid
21	C18:3n6c	γ -Linolenic acid	<i>Cis</i> -6,9,12-Octadecatrienoic acid
22	C18:3n3c	Linolenic acid	<i>Cis</i> -9,12,15-Octadecatrienoic acid
23	C20:0	Arachidic acid	Icosanoic acid
24	C20:1		<i>Cis</i> -11-Eicosenoic acid
25	C20:2n6		<i>Cis</i> -11,14-Eicosadienoic acid
26	C20:3n6	γ -Homolinolenic acid	<i>Cis</i> -8,11,14-Eicosatrienoic acid
27	C20:3n3		<i>Cis</i> -11,14,17-Eicosatrienoic acid
28	C20:4n6	Arachidonic Acid (ARA)	<i>Cis</i> -5,8,11,14-Eicosapentaenoic acid
29	C20:5n3	Eicosapentaenoic Acid (EPA)	<i>Cis</i> -5,8,11,14,17-Eicosapentaenoic acid
30	C21:0		Heneicosanoic acid
31	C22:0	Behenic acid	Docosanoic acid
32	C22:1	Erucic acid	<i>Cis</i> -13-Docosenoic acid
33	C22:2		<i>Cis</i> -13,16-Docosadienoic acid
34	C22:6n3	Docosahexaenoic Acid (DHA)	<i>Cis</i> -4,7,10,13,16,19-Docosahexaenoic acid
35	C23:0		Tricosanoic acid
36	C24:0	Lignoceric acid	Tetracosanoic acid
37	C24:1	Nervonic acid	<i>Cis</i> -15-tetracosenoic acid
38	C17:0-D33	Heptadecanoic acid-D33	

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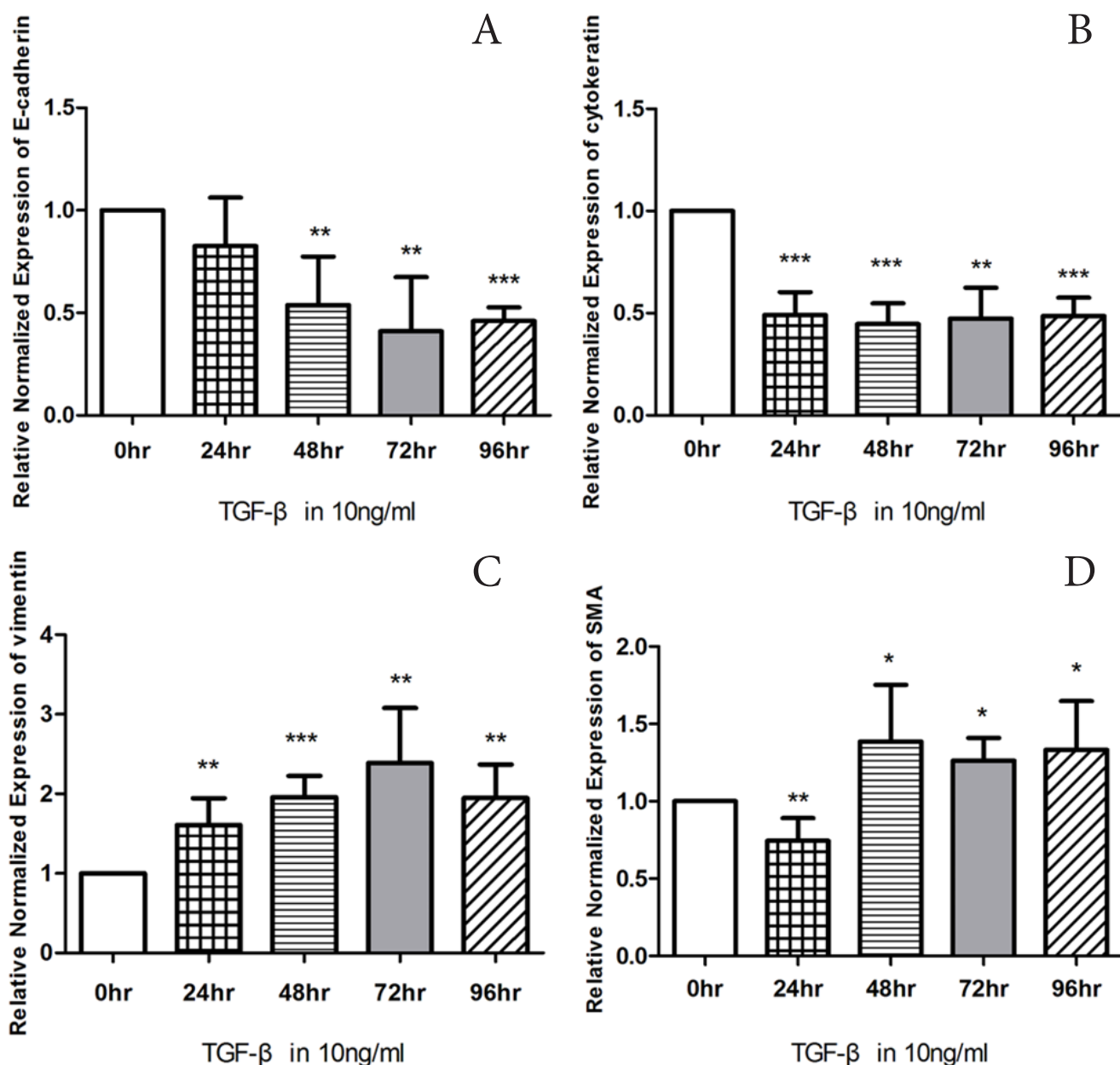


Figure S1. Cells were treated with TGF- β in 10 ng/ml for 24, 48, 72, and 96 hrs individually. A and B: Except 24 hrs, expression of epithelial marker E-cadherin and cytokeratin were significantly depressed. C&D: mesenchymal marker vimentin and alpha-SMA were significantly up-regulated. (* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$).

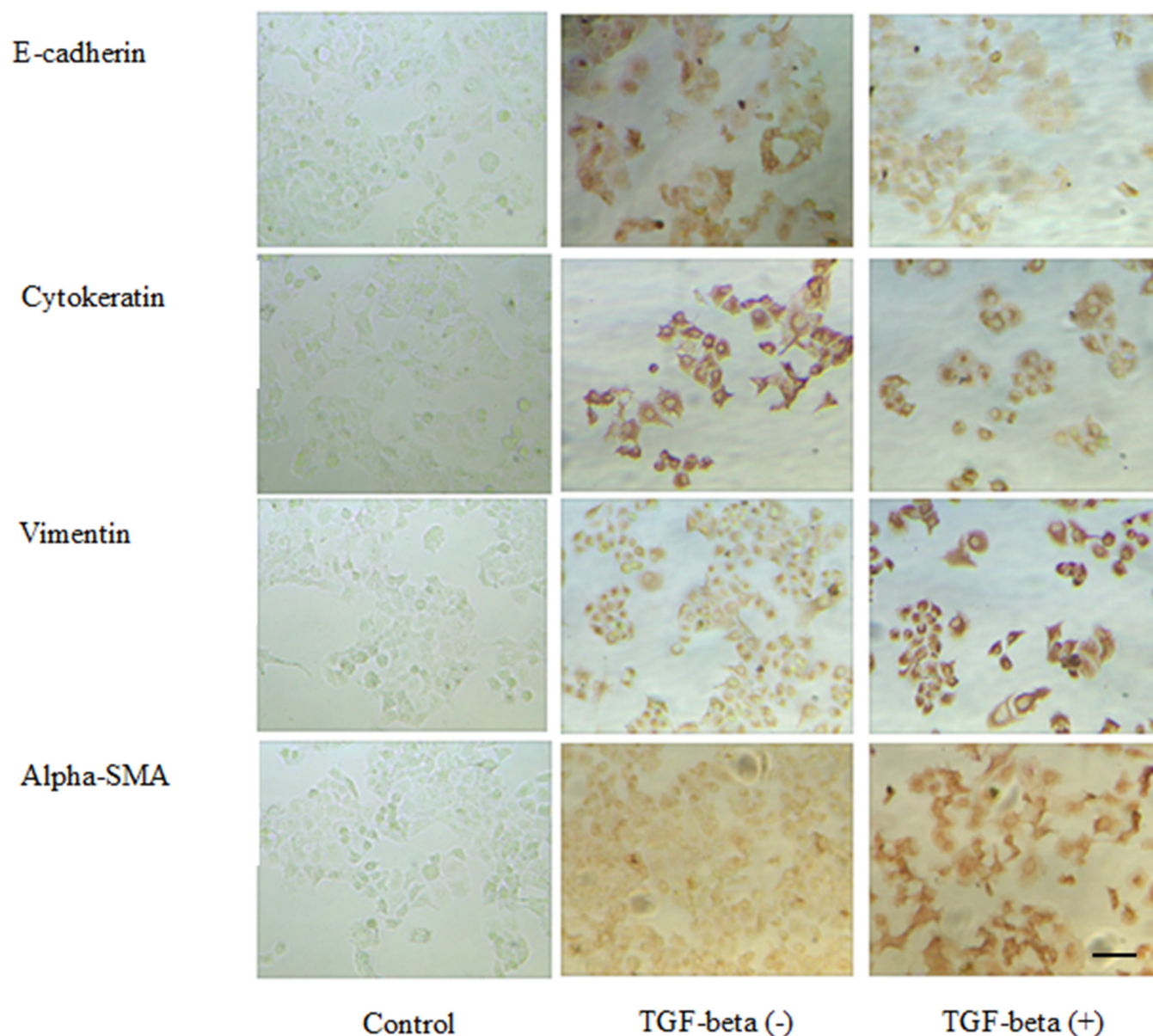


Figure S2. ICC results of EMT biomarkers (scale bar: 100 μ m). After induced with TGF- β at 10ng/ml for 72 hrs, Panc-1 cells down-regulated epithelial markers, E-cadherin and cytokeratin, whereas up-regulated mesenchymal markers, vimentin and alpha-SMA.

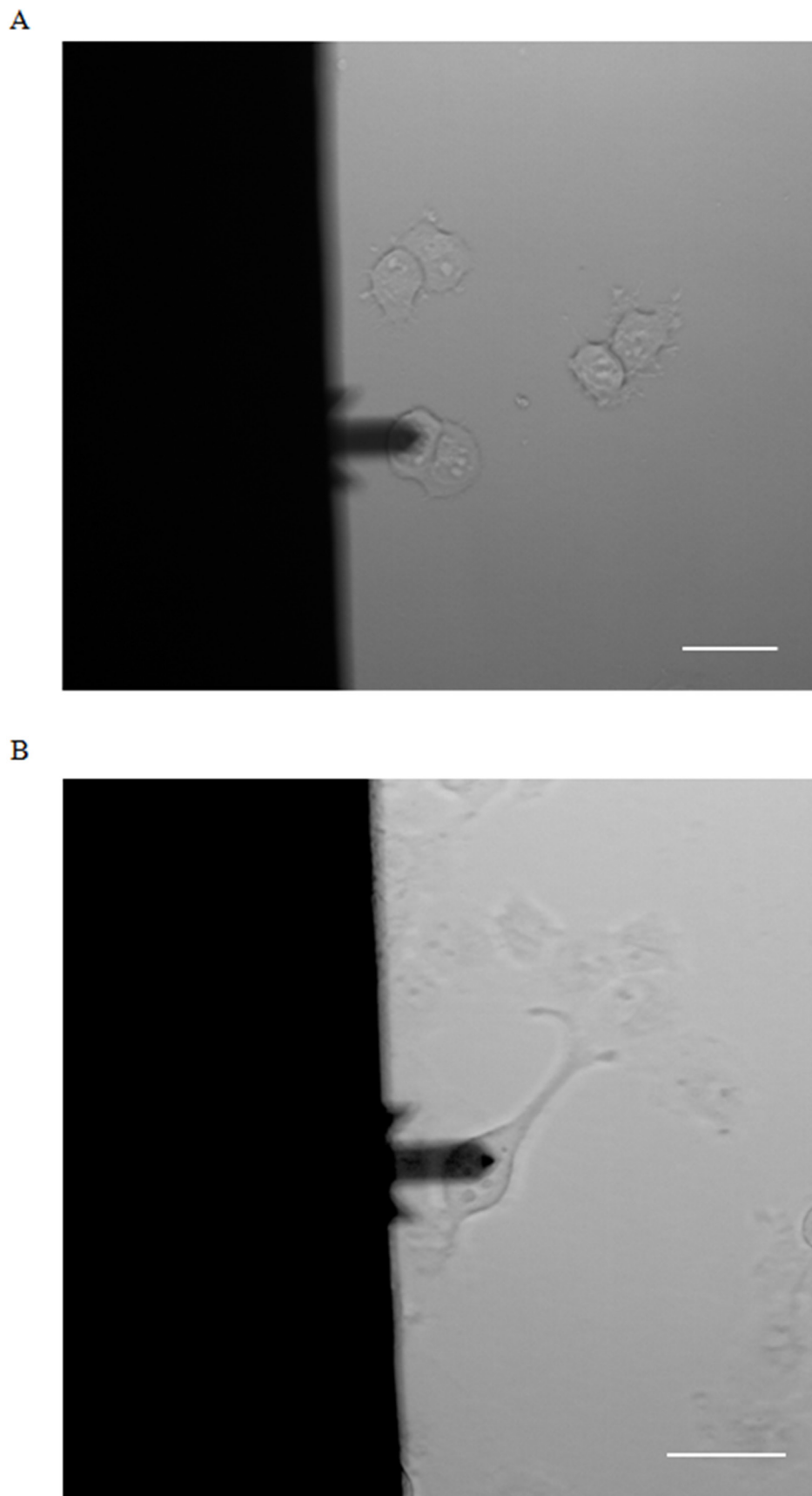


Figure S3. AFM photographs of pre/post EMT Panc-1 cells (scale bar: 40 μm). (A) AFM photograph of the control group. (B) AFM photograph of EMT group.

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