

Supplementary Information

A biomimetic electrospun membrane supports the differentiation and maturation of kidney epithelium from human stem cells

Authors

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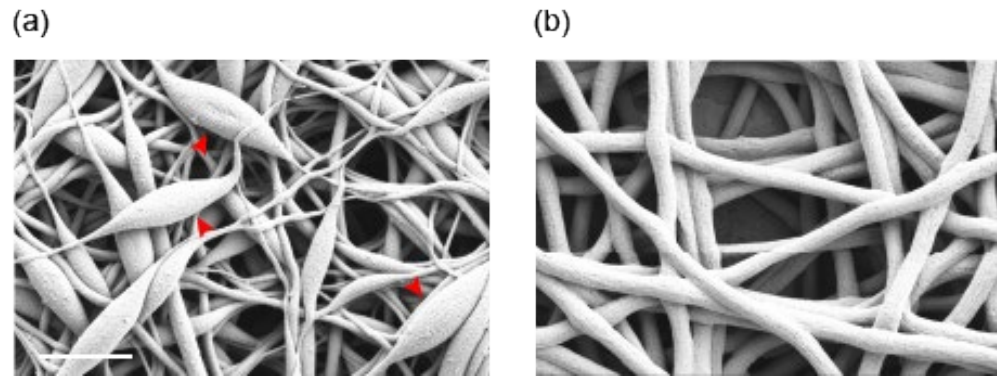


Figure S1. Effect of silk fibroin electrospinning solution content on the resulting nanofiber morphology. (a) Electrospun silk fibroin with a low PEO content (5%), where bead-like defects can be observed. Red arrowheads, examples of beaded structure. (b) Electrospun silk fibroin with a high PEO content (10%), where uniform nanofibers were generated. Scale bar 2.5 μm .

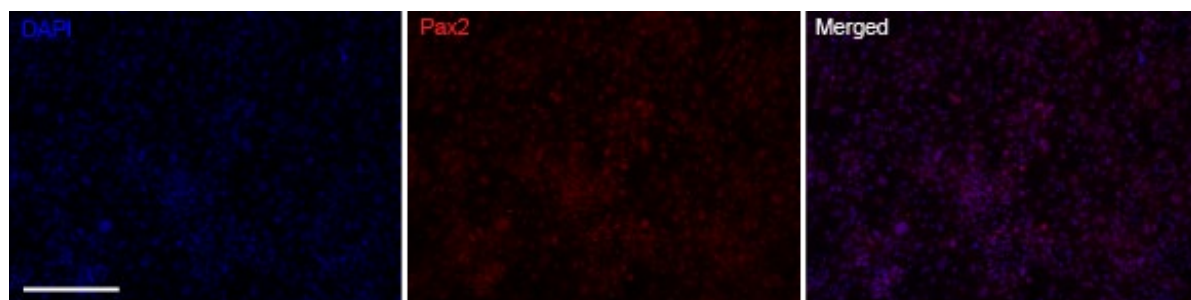


Figure S2. Immunostaining of hiPS cell-derived intermediate mesoderm cells for Pax2 (red, middle). Cells were counterstained with DAPI (blue, left). Merged view of the cells is shown on the right. Scale bar 275 μ m.

Table S1. List of the primers used in the RT-qPCR quantification experiment.

Gene name	Name	Sequence
GAPDH	GAPDH-F	GGAGCGAGATCCCTCCAAAAT
	GAPDH-R	GGCTGTTGTCATACTTCTCATGG
PAX2	PAX2-F	AGATTCCCAGAGTGGTGTGG
	PAX2-R	CTCAAAGACCCGATCCAAAG
Nephrin	Nephrin-F	GCTTCTGCTCCTCTCCAATG
	Nephrin-R	CCCTGCCTCTGTCTTCTCTG
WT1	WT1-F	GGGTACGAGAGCGATAACCA
	WT1-R	TCTACCAGTGTGCTTCCTG
Synaptopodin	Synpo S1	CATTCTGGAGGAGTCGATGG
	Synpo AS1	ATCCAGCAAGTCTGGATTCTG