

Preparation of POMA Nanofibers by Electrospinning and Its Applications in Tissue Engineering

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Abstract : In this manuscript, we produced neat electrospun poly(o-methoxyaniline) (POMA) fibers and utilized it for applying the growth of neural stem cells. The transparency and morphology of as-prepared POMA fibers were characterized by UV-visible spectroscopy and scanning electron microscopy, respectively. It was found to have no adverse effects on the long-term proliferation of the neural stem cells (NSCs), retained the ability to self-renew, and exhibit multi-potentiality. Results of immunofluorescence staining studies confirmed that POMA electrospun fibers could provide a great environment for NSCs and enhance its differentiation.

Keywords : electrospun, polyaniline, neural stem cell, differentiation

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