

Electronic Supplementary Information (ESI) for Lab on a Chip

Human neuromuscular junction on micro-structured microfluidic devices implemented with a custom Micro Electrode Array (MEA)

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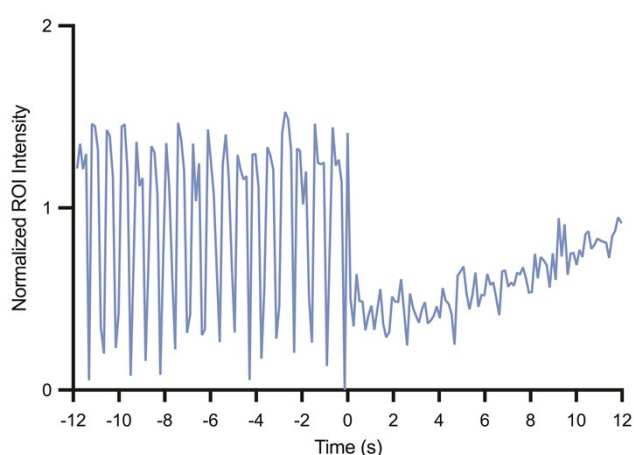


Figure S1: Effect of TTX on muscle contraction to assess NMJ functionality. Normalized intensity time plot for a time-lapse movie of an innervated myotube before and after TTX treatment (0 represent the start of treatment).

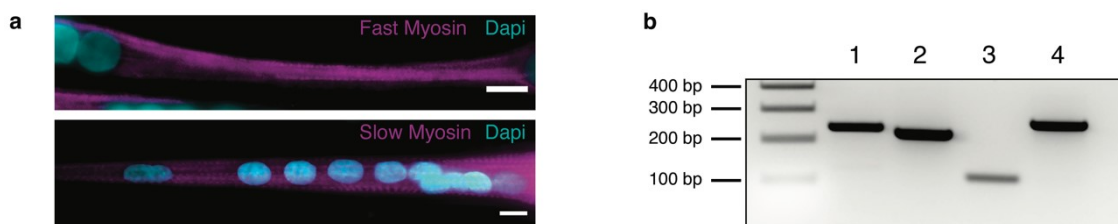


Figure S2: Characterization of myoblast fibers obtained after differentiation and co-culture with motor neurons. The culture was a mix of fast myosin- and slow myosin-positive staining (a). RT-PCR showed expression of human MYH1 gene (lane 1 – 240bp), MYH2 gene (lane 2 – 225bp), MYH4 gene (lane 3 – 110bp) and MYH7 (lane 4 – 270bp), respectively expressed in type I, IIa, IIb and IIx fibers (b). Scale bar 10 μ m.