

补充材料

力信号对心肌细胞跳动的调控研究*

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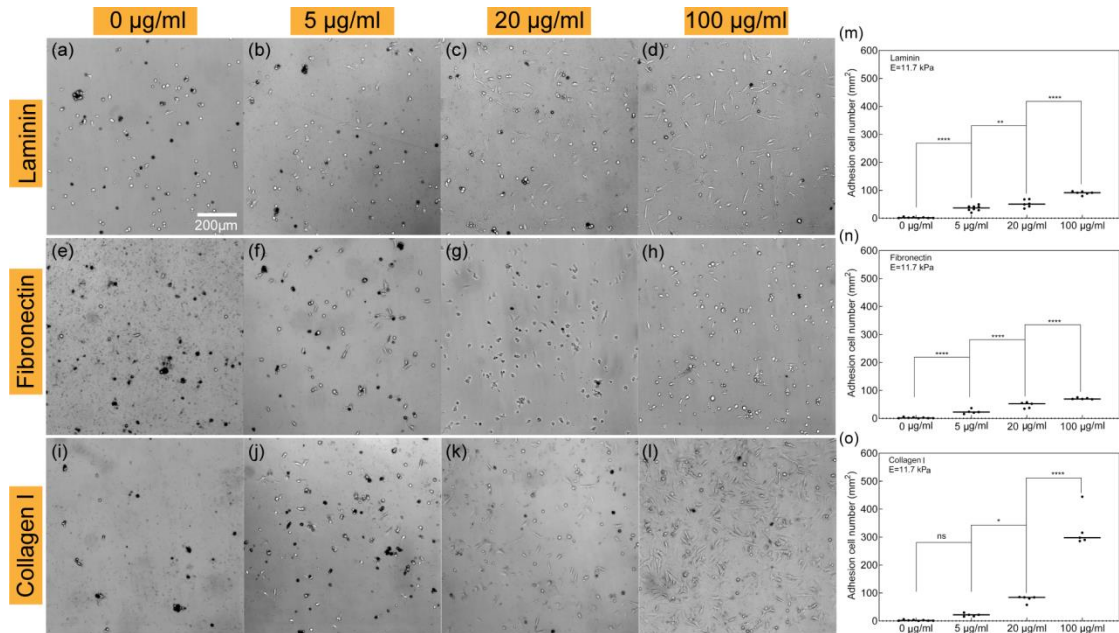


图 S1 接种 48 h 后, 心肌细胞在杨氏模量为 11 kPa, 不同配体种类及浓度的基质上贴壁情况 (a)–(d)配体均为 Laminin, 浓度分别为 0/5/20/100 $\mu\text{g}/\text{mL}$; (e)–(h)配体均为 Fibronectin, 浓度分别为 0/5/20/100 $\mu\text{g}/\text{mL}$; (i)–(l)配体均为 Collagen, 浓度分别为 0/5/20/100 $\mu\text{g}/\text{mL}$; (m)–(o)分别为心肌细胞在杨氏模量为 11 kPa, 包被不同 Laminin 或 Fibronectin 或 Collagen I 浓度的 PA gel 上的贴壁统计图 ($n \geq 5$)

Fig.S1. The cardiomyocytes adhesion on substrates (11 kPa) with different types and concentrations of ligands after incubation of 48 hours: (a)–(d) Laminin at concentrations of 0, 5, 20, and 100 $\mu\text{g}/\text{mL}$, respectively; (e)–(h) Fibronectin at concentrations of 0, 5, 20, and 100 $\mu\text{g}/\text{mL}$, respectively; (i)–(l) Collagen I at

concentrations of 0, 5, 20, and 100 $\mu\text{g/mL}$, respectively; (m)—(o) Statistical graphs of cardiomyocyte adhesion on PA gels with Young's modulus of 11 kPa and coated with different concentrations of Laminin or Fibronectin or Collagen I ($n \geq 5$)

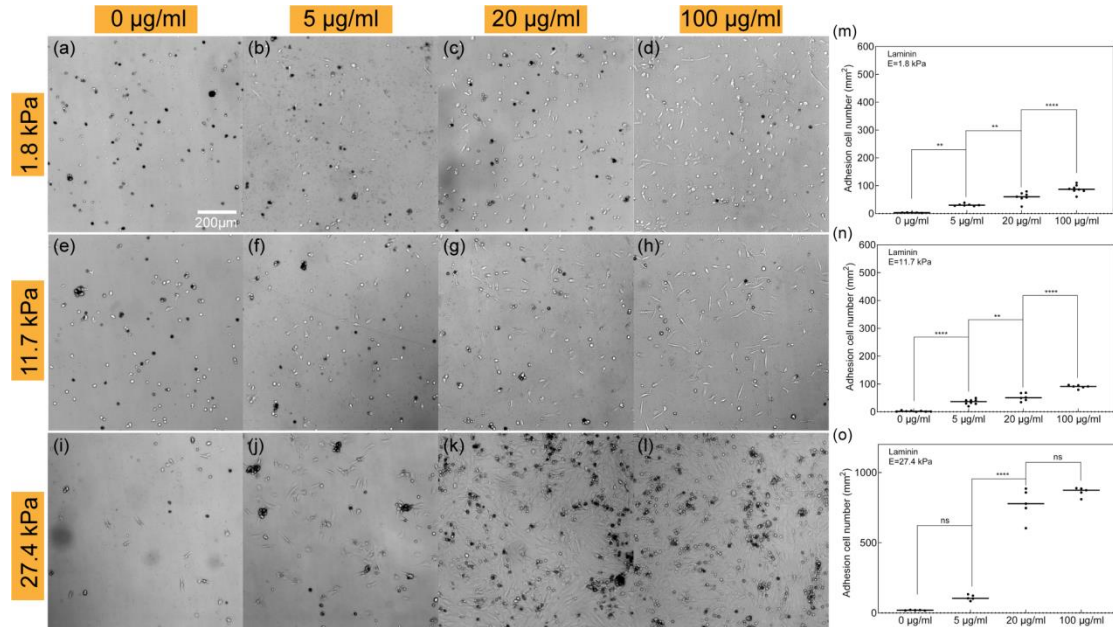


图 S2 接种 48 h 后，心肌细胞在不同硬度和 Laminin 浓度的基质上贴壁情况 (a)—(d) PA gel 杨氏模量均为 1.824 ± 0.111 kPa，配体 Laminin 的浓度分别为 0/5/20/100 $\mu\text{g/mL}$; (e)—(h) PA gel 杨氏模量均为 11.688 ± 0.493 kPa，配体 Laminin 的浓度分别为 0/5/20/100 $\mu\text{g/mL}$; (i)—(l) PA gel 杨氏模量均为 27.358 ± 2.331 kPa，配体 Laminin 的浓度分别为 0/5/20/100 $\mu\text{g/mL}$; (m)—(o)分别为心肌细胞在不同杨氏模量，包被不同 Laminin 浓度的 PA gel 上的贴壁统计图 ($n \geq 5$)

Fig. S2. The cardiomyocytes adhesion on different stiffness substrates with different concentrations of Laminin after 48 hours incubation: (a)—(d) 1.8 kPa substratum at concentrations of 0, 5, 20, and 100 $\mu\text{g/mL}$, respectively; (e)—(h) 11.7 kPa substratum at concentrations of 0, 5, 20, and 100 $\mu\text{g/mL}$, respectively; (i)—(l) 27.4 kPa at concentrations of 0, 5, 20, and 100 $\mu\text{g/mL}$, respectively; (m)—(o) Statistical graphs of cardiomyocyte adhesion on PA gels with different Young's modulus and coated with various concentrations of Laminin ($n \geq 5$).