

SUPPLEMENTARY MATERIAL

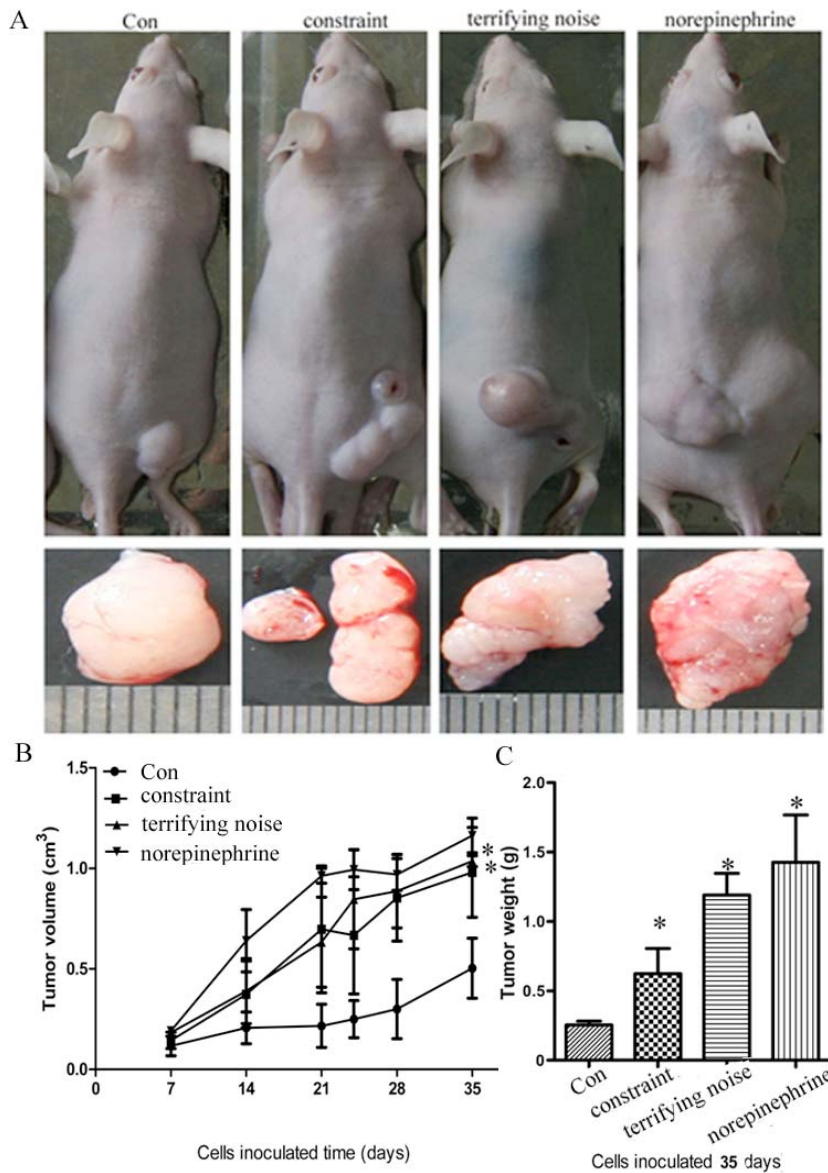
 β 2-AR-HIF-1 α : A Novel Regulatory Axis for Stress-Induced Pancreatic Tumor Growth and Angiogenesis

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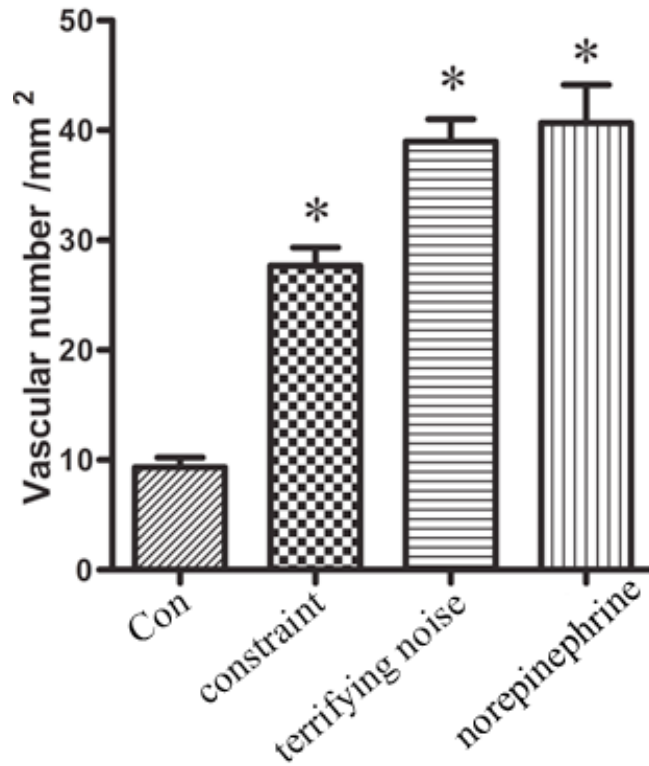
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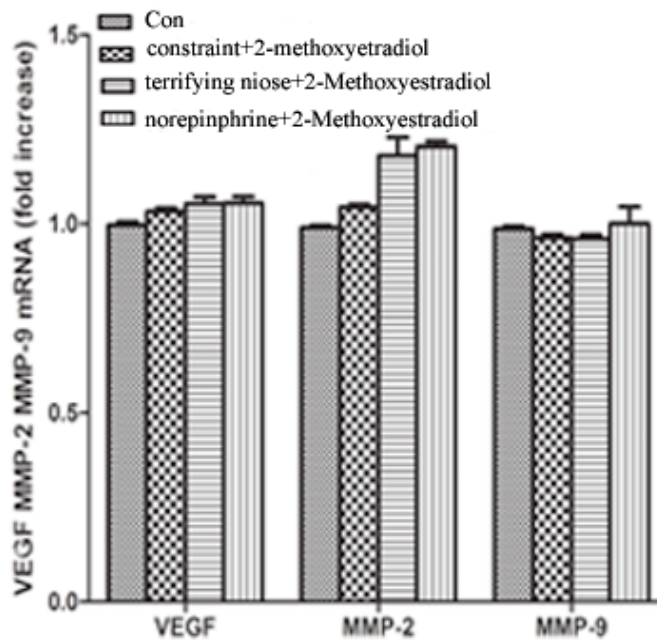
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Supplement Fig. (1). Chronic stress stimulates pancreatic tumor growth in xenografted mice. MIA PaCa-2 cells were inoculated 2 w after the initiation of stress. **(A)** stress models. **(B)** tumor diameter in control and stress groups after 5 w. **(C)** the tumor volume and weight. * $P < 0.05$ compared with the control group.



Supplement Fig. (2). Tumor angiogenesis increases in chronically stressed animals. Microvessel density was calculated statistically using Image Pro Plus 6.0 software. Mice were grouped (n=8) as: (A) control group, (B) constraint, (C) terrifying noise, and (D) norepinephrine. The densities of blood vessels (CD31) in the tumor tissues from the mice within the two stress groups and the norepinephrine treated group are higher than that from the mice in the control group ($P < 0.05$).



Supplement Fig. (3). Effect of HIF-1 α on VEGF, MMP-2, and MMP-9 mRNA levels were detected using real time-PCR. Data from at least three independent experiments with duplicate determinations are expressed as means \pm SEM.