

Cardiac Specific Overexpression of Mitochondrial Omi/HtrA2 Induces Myocardial Apoptosis and Cardiac Dysfunction

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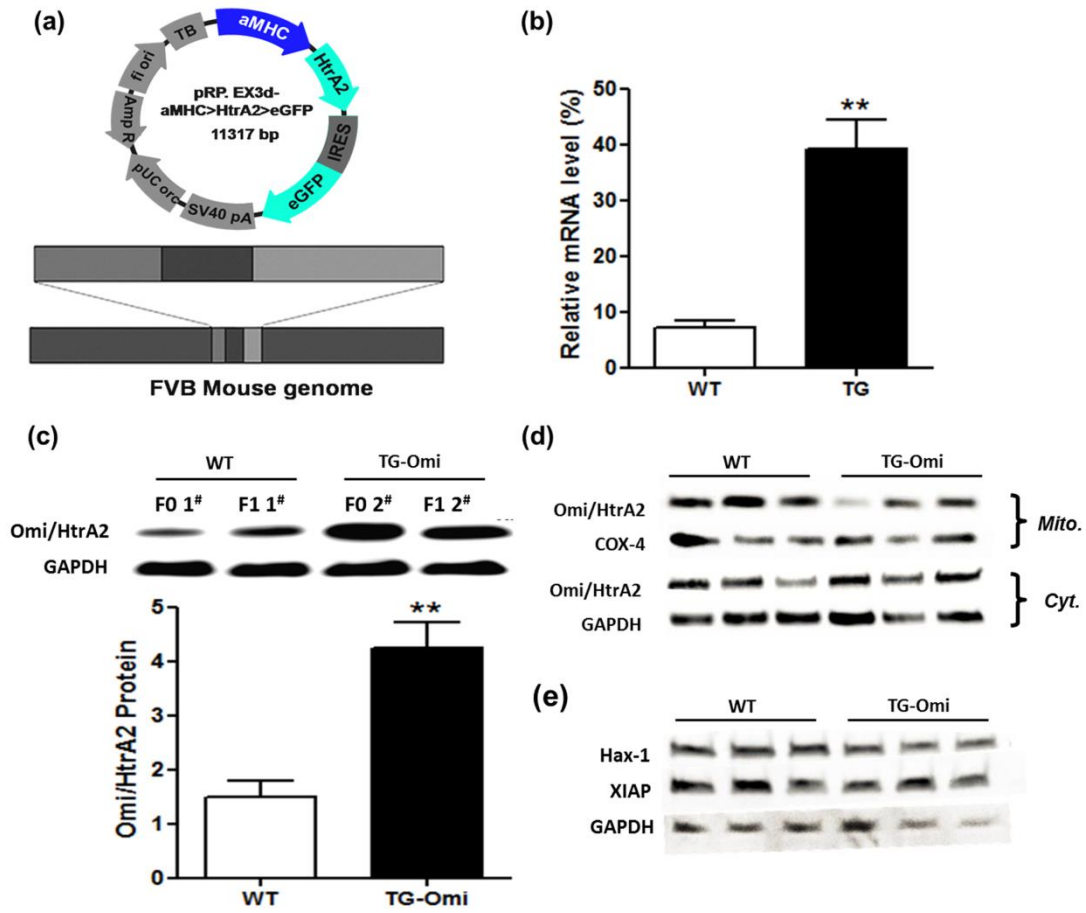
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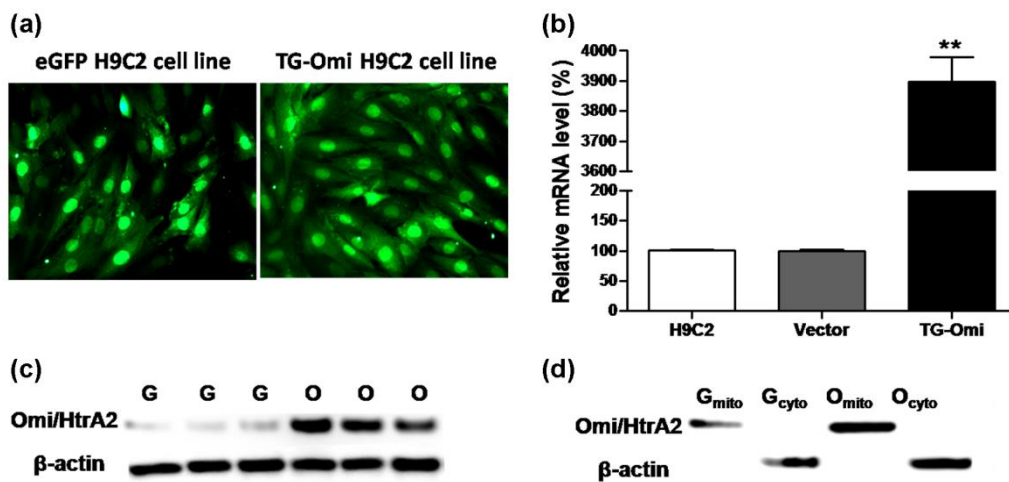
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Supplemental Figure 1



Supplemental Figure 2



Supplemental Figure Legend

Supplemental Figure 1. General characteristics of cardiac-specific Omi/HtrA2 transgenic mice. **(a)**, Schematic illustration of DNA construct, consisting of cardiac-specific alpha-myosin heavy chain (aMHC) promoter and mouse Omi/HtrA2 cDNA. **(b)**, Omi/HtrA2 mRNA expression was measured by quantitative RT-PCR with mRNA isolated from the left ventricles of WT mice and Omi/HtrA2 transgenic mice (TG - Omi). **(c)**, Western blot of Omi/HtrA2 protein in left ventricle protein extracts from WT mice and Omi/HtrA2 transgenic mice (TG - Omi). **(d)**, Western blot of Omi/HtrA2 protein in either mitochondrial (mito.) or cytosolic (cyto.) fraction from WT mice and Omi/HtrA2 transgenic mice. **(e)**, Western blot of XIAP and HAX-1 protein in left ventricle protein extracts from WT mice and Omi/HtrA2 transgenic mice. $n = 3 - 5/\text{genotype}$. $**p < 0.01$ vs. WT

Supplemental Figure 2. General characteristics of H9C2 cell lines stably transfected with mitochondrial Omi/HtrA2. **(a)**, Fluorescent images of green shows positive transfected H9C2 cell with Omi/HtrA2. **(b)**, Omi/HtrA2 mRNA expression was measured with quantitative RT-PCR with mRNA. **(c)**, Western blot of Omi/HtrA2 protein in whole cell fraction. **(d)**, Western blot of Omi/HtrA2 protein in either mitochondrial or cytosolic fraction. (G: H9C2 cell line stably transfected with eGFP; O: H9C2 cell line with both eGFP and mitochondrial Omi/HtrA2; mito: Mitochondrial fraction; cyto: Cytoplasmic fraction) $n=10-12$ each. $**p < 0.01$ vs. eGFP H9C2 cell line (Vector)