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# **ACCEPTED MANUSCRIPT**

# MiR-485-5p modulates mitochondrial fission through targeting mitochondrial anchored protein ligase in cardiac hypertrophy

Yanfang Zhao <sup>a</sup>, Murugavel Ponnusamy <sup>a</sup>, Cuiyun Liu <sup>a</sup>, Jing Tian <sup>b</sup>, Yanhan Dong <sup>a</sup>, Jinning Gao <sup>a</sup>, Chaoqun Wang <sup>a</sup>, Yuan Zhang <sup>a</sup>, Lei Zhang <sup>a</sup>, Kun Wang <sup>a</sup>,\*, Peifeng Li <sup>a</sup>,\*

<sup>a</sup> Center for Developmental Cardiology, Institute for Translational Medicine, Qingdao University, Deng Zhou Road 38, Qingdao 266021, China

<sup>b</sup> Department of cardiology, The Affiliated Cardiovascular Hospital of Qingdao University,

Qingdao 266003, China

#### \*Corresponding

Kun Wang, Peifeng Li, Center for Developmental Cardiology, Institute for Translational Medicine, Qingdao University, Deng Zhou Road 38, Qingdao 266021, China Phone: +86 0532 82991791

E-mail address: wangk696@163.com (K.W.), peifli@qdu.edu.cn (P.F. L.)

#### Highlights

- The pathogenesis of cardiac hypertrophy is tightly associated with mitochondrial fission
- MAPL participates in modulation of mitochondrial fission and hypertrophy in cardiomyocytes
- miR-485-5p inhibits MAPL expression and increases Mfn2 level
- MiR-485-5p suppresses mitochondrial fission and hypertrophy in cardiomyocytes
- miR-485-5p and MAPL constitute a signaling axis to regulate mitochondrial fission and cardiac hypertrophy

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