The cardiac z-disc protein CEFIP regulates cardiomyocyte hypertrophy by modulating of calcineurin signaling

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LEGENDS FOR SUPPLEMENTARY MOVIE

Supplementary movie S1- FRAP analysis of CEFIP dynamics in z-discs of cultured myotubes expressing EGFP-tagged CEFIP using a Cell Observer Spinning Disk Confocal Microscope (Carl Zeiss, Jena, Germany) equipped with an external 473 nm laser coupled via a scanner (UGA-40, Rapp OptoElectronic, Hamburg, Germany). (00:00:00 indicates hours:minutes:seconds).

LEGENDS FOR SUPPLEMENTARY FIGURES

Supplementary Figure 1: Alignment of CEFIP protein sequences from different mammalian species (*Homo sapiens, Mus musculus, Rattus norvegicus, Macaca mulatta, Canis lupus, and Bos taurus*) illustrates the high conservation among these species.

Supplementary Figure 2: Immunostaining of neonatal rat cardiomyocytes (NRVCM), adult rat ventricular cardiomyocytes (ARVCM) and intact mouse heart tissue with a specific CEFIP antibody reveals a strong signal at the sarcomeric z-disc (A-C). DAPI was used for nuclear staining. Immunostaining of intact mouse kidney and liver tissue (D-E) with CEFIP antibody does not show a signal. Scale bar $20\mu m$

Supplementary Figure 1





Supplementary Figure 2