SUPPLEMENTAL MATERIAL

Supplemental Figure Legends

Online Figure I.
(A) Pulse field gel electrophoresis of linearized recombineered BAC DNA. Recombineered BAC DNA was linearlized with Ascl, followed by purification with column fractionation. Fraction 4 (Lane 3) was injected into pronuclei.
(B) Probe design for Southern blotting of CyclinA2-LacZ-EGFP BAC transgenic line. Short DNA sequence of BAC vector arm adjacent to linearized Ascl site was used as probe.

Online Figure II.
Fluorescence microscope images of CyclinA2-LacZ-EGFP MEFs in each S/G2 (a1-3), Metaphase (b1-3), and Telophase (c1-3). MEFs were immunostained with anti-β-gal antibody, anti-S10pH3 and staining with DAPI. Note cytosolic dispersion of CyclinA2-βgal in metaphase (b2), and its disappearance in telophase (c2). Scale bar: 20µm.

Online Figure III.
Quantitative analysis of CyclinA2-EGFP or /and EdU positive myocardial cells. Heart tissue sections of ED10.5 were stained for CyclinA2-EGFP, Troponin T, EdU, and DAPI. Cardiomyocytes were defined by Troponin T staining.

Online Figure IV.
Quantitative analysis of CyclinA2-EGFP myocardial cells at PN14, 16, 18, and 20. Heart tissue sections were stained for CyclinA2-EGFP, PDGFRα, CD31, CD45, CD146, EdU, and DAPI. The number of myocardial nuclei was defined by excluding cells labeled by PDGFRα, CD31, CD45, or CD146. Note gradual and steady decrease throughout these stages.

Online Figure V.
(A) Fluorescence microscopy images of PN15 heart sections from Protamine-Cre;CyclinA2-EGFP mice, stained for CyclinA2-EGFP, Troponin T, and EdU. Note CyclinA2-EGFP cells colocalized with EdU staining (white circles). Scale bar: 50µm.
(B) X-gal staining of PN15 heart sections from CyclinA2-LacZ-EGFP mice. Scattered CyclinA2-β-gal positive cells were observed in LV wall (black circles). Scale bar: 50µm.
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