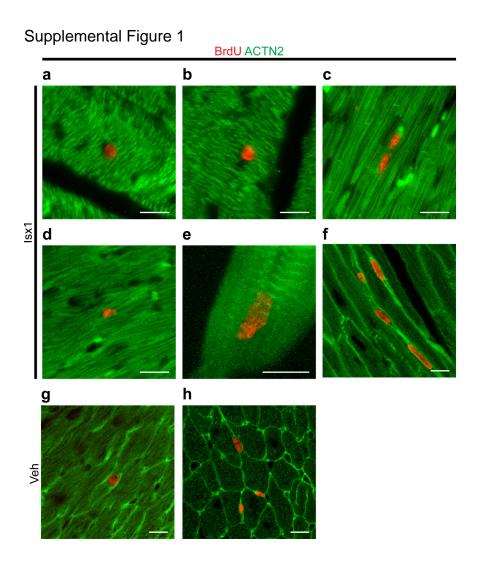
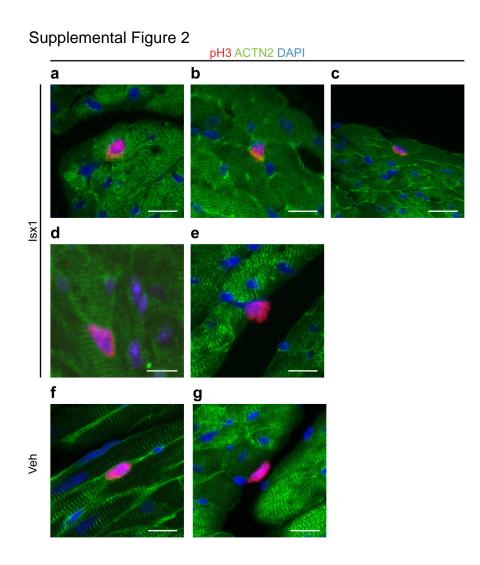
Supporting Information for

## Targeting native adult heart progenitors with cardiogenic small-molecules

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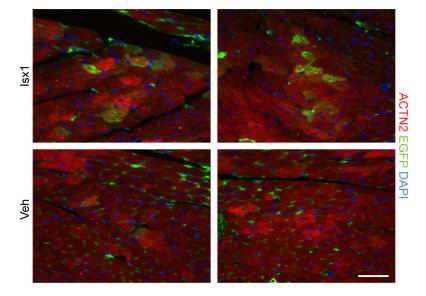


Supplemental Figure 1. Isx1 activates DNA synthesis in myocardial cells, including cardiomyocytes, *in vivo*. BrdU immunohistochemistry (red) in uninjured adult mouse heart injected with Isx (a-e) or vehicle (f and g) co-stained with ACTN2 (green) and DAPI (blue) (Scale bars =  $10\mu$ m). Probable BrdU+ cardiomyoctes are depicted in images a-e and g and non-cardiomyocytes in images f and h.



Supplemental Figure 2. Isx1 increases phosphohistone H3 positive myocardial cell, including cardiomyocyte, number *in vivo*. Phospho-histone H3 immunohistochemistry (red) in uninjured adult mouse heart injected with Isx (a-e) or vehicle (f and g) co-stained with ACTN2 (green) and DAPI (blue) (Scale bars =  $10\mu$ m). A probable phospho-histone H3+ cardiomyocyte is depicted in image (a) and several other positive non-cardiomyocytes in images b-g.

## Supplemental Figure 3



Supplemental Figure 3. Isx1 increases Notch-CBF1-RE<sub>x4</sub>-EGFP myocardial cell, including cardiomyocyte, number *in vivo*. EGFP (red) immunohistochemistry localized to TNNI3 (green) cardiomyocytes, co-stained with DAPI (blue) in uninjured adult mouse heart injected with Isx (upper panels) or vehicle (lower panels) (Scale bars =  $10\mu$ m).