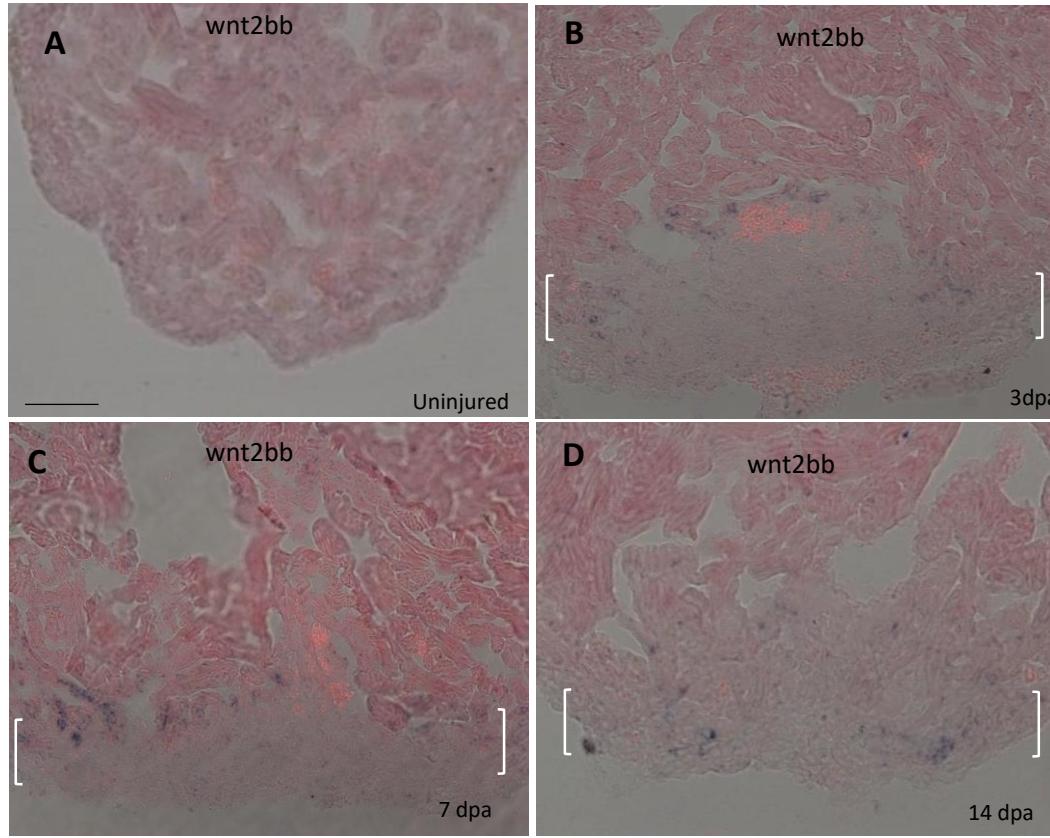
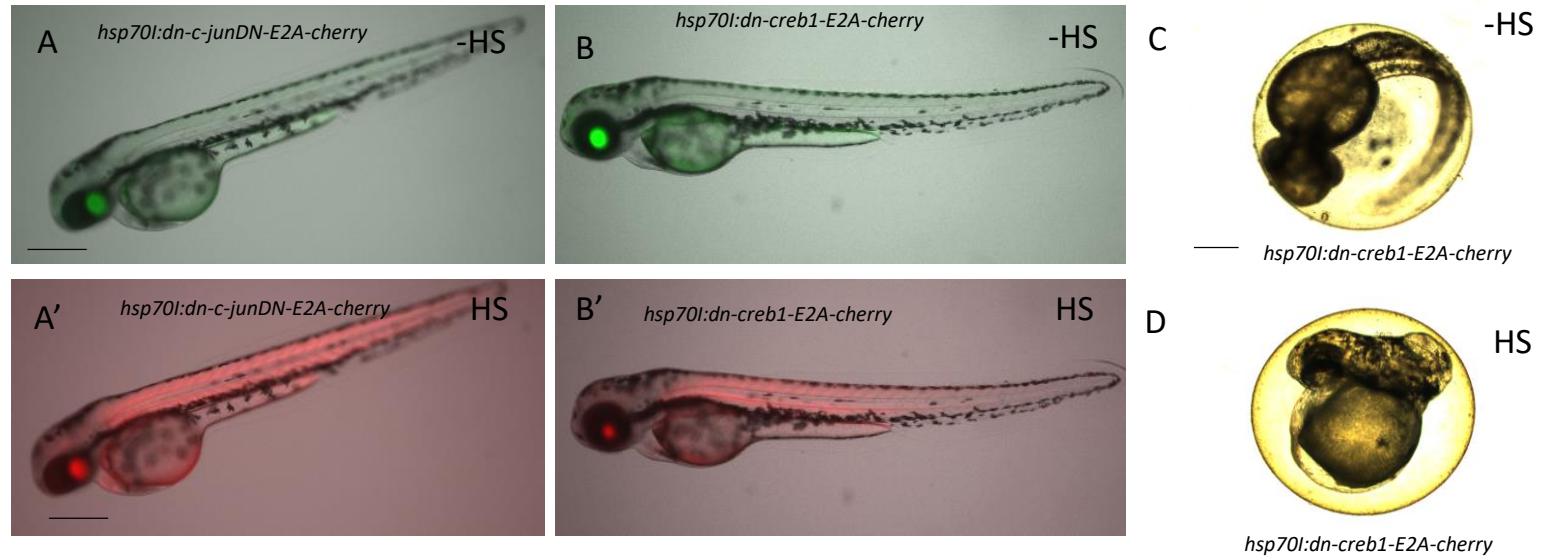


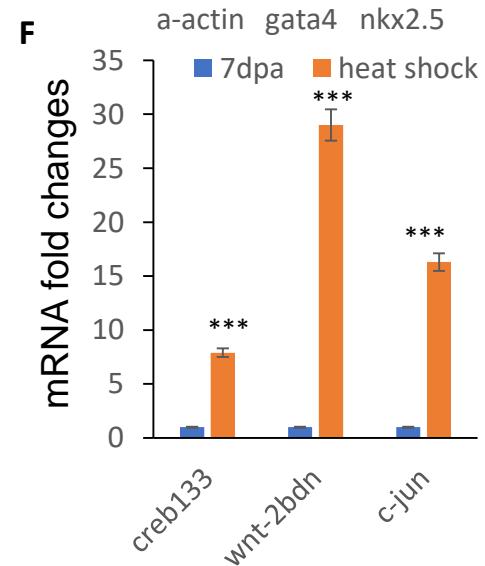
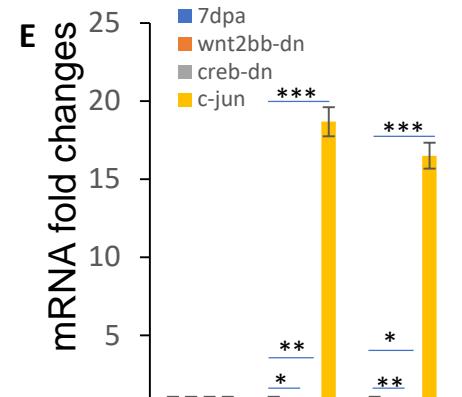
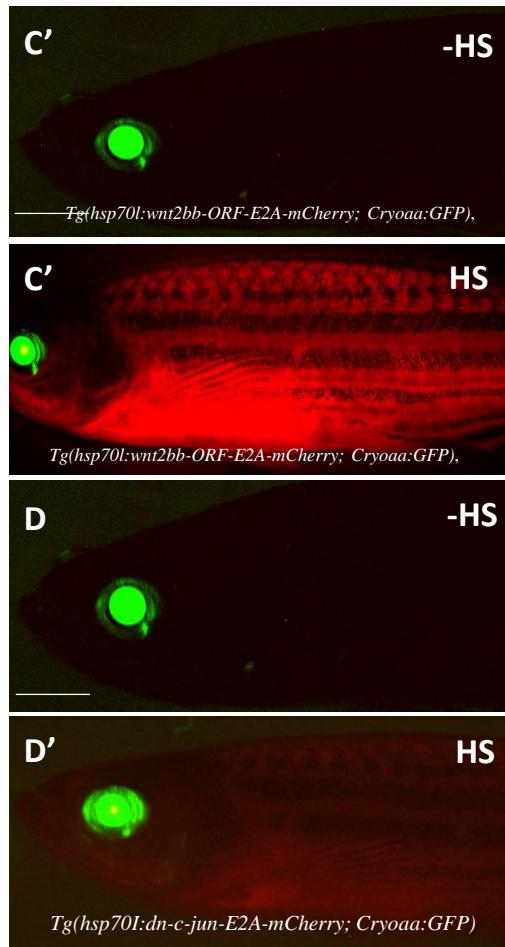
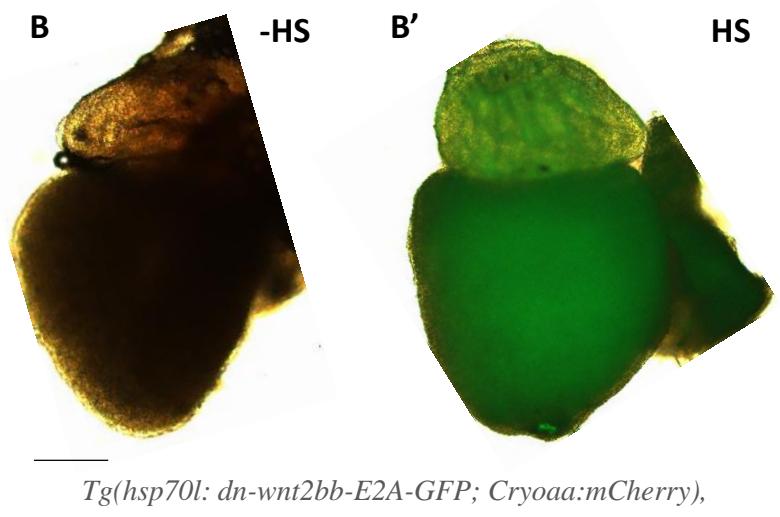
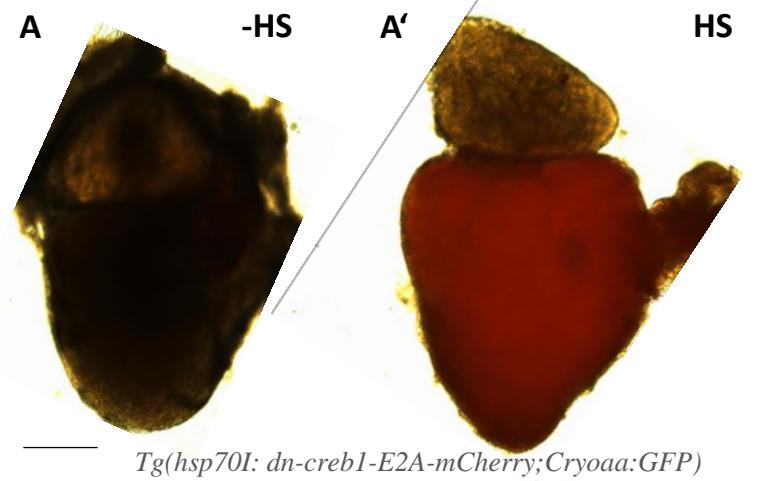
**Supplementary Fig 1 . *C-jun*, *creb1* and *jnk1* expression during cardiac regeneration by ISH analyses**



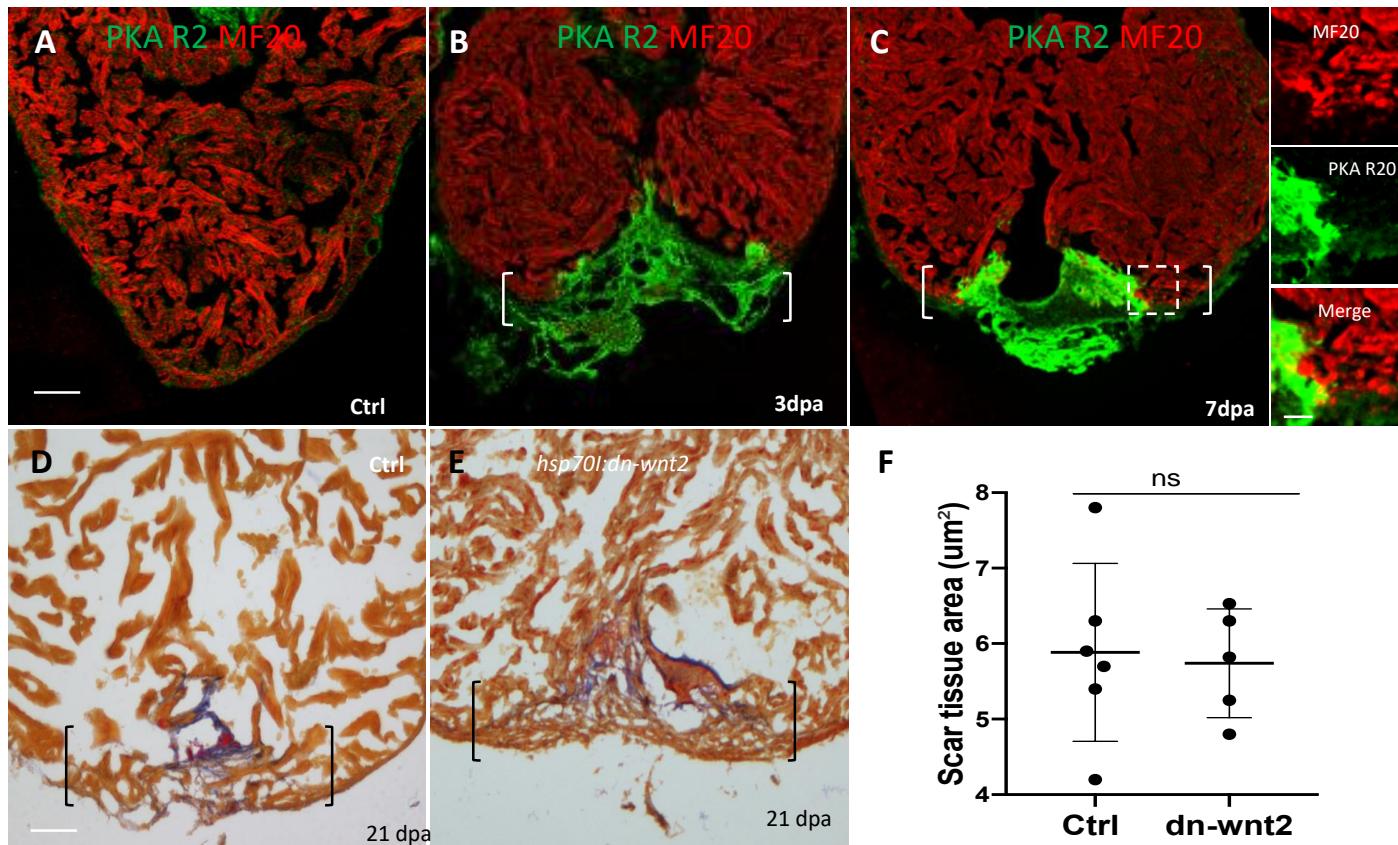
**Supplementary Fig 2. *Wnt2bb* expression during cardiac regeneration by ISH analyses.**



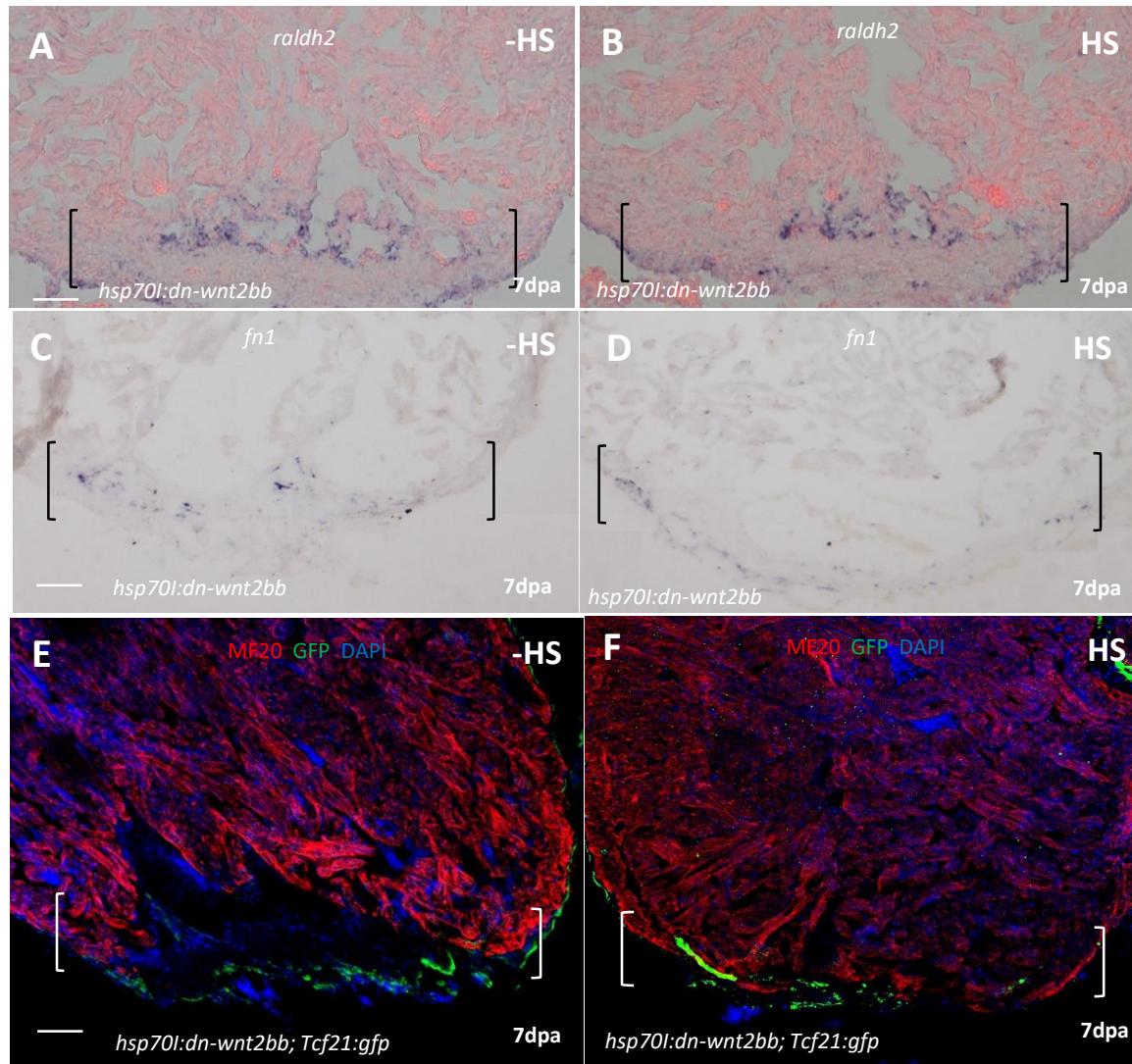
**Supplementary Fig 3. Expression of *jun*, *jnk*, *creb* genes involved in noncanonical Wnt pathway analysis during cardiac regeneration.**



**Supplementary Fig 4. Identification of transgenic fish and gene expression efficiency**



**Supplementary Fig 5.** *pka* activated in noncardiomyocyte cells during heart regeneration.



Supplement Fig 6. Wnt2bb dominant hearts have no affection on endocardium, epicardium, and fibroblasts.