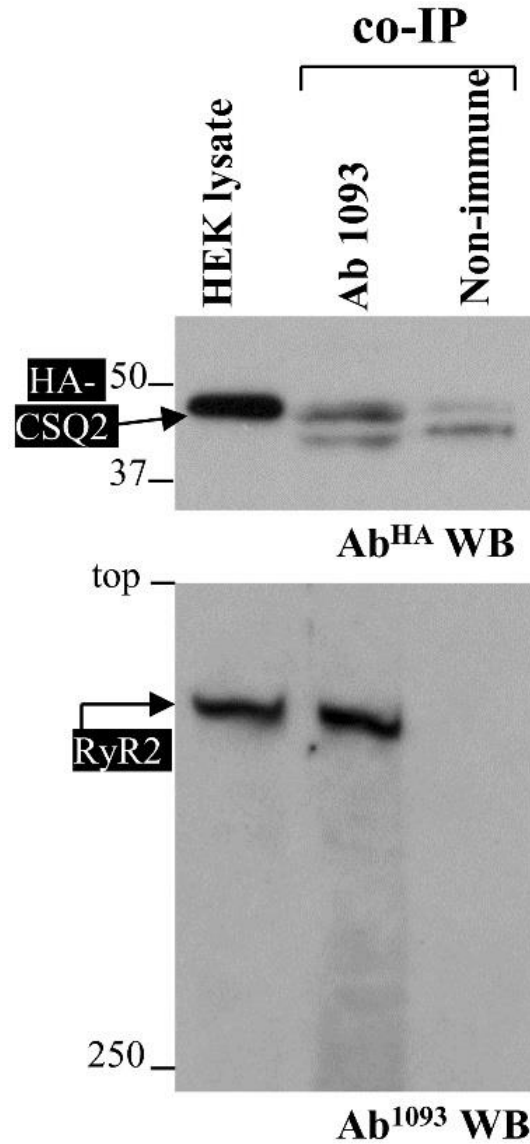


**Fig.S1: Assessment of CSQ2, junctin and triadin expression in HEK293 cells**

Western blot analysis ( $n \geq 3$ ) assessing expression of CSQ2 (A), junctin (B) and triadin (C) in HEK293 cells using rabbit polyclonal anti-calsequestrin (ab3516, Abcam), mouse polyclonal anti-junctin (ab72846, Abcam) and goat polyclonal anti-triadin (sc33393, Santa Cruz Biotechnology), respectively. Microsomes (100  $\mu$ g) from mouse cardiac tissue were used as positive control; HEK293 samples were loaded at 50  $\mu$ g, whereas untransfected (Non-T) cell homogenate was also included at 10-fold excess (500  $\mu$ g). Lack of signal from the 10-fold excess sample from untransfected HEK293 cells suggests that these luminal accessory proteins are not expressed in this cell line.



**Fig.S2: Recombinant RyR2 co-immunoprecipitates with CSQ2 in HEK293 cells**

Co-IP experiments ( $n = 3$ ) of recombinant human RyR2 co-expressed with HA-CSQ2 in mammalian HEK293 cells. RyR2 was immunoprecipitated with Ab<sup>1093</sup> from solubilised HEK293 lysates and the presence of associated HA-CSQ2 was analysed by SDS-PAGE (12% gel) and immunoblotting using Ab<sup>HA</sup> (top). As negative control, co-IP assays were carried out with non-immune rabbit IgG. To detect isolated RyR2, 1/10<sup>th</sup> of IP samples was analysed by SDS-PAGE (4% gel) and Western blotting using Ab<sup>1093</sup> (bottom). An aliquot of HEK293 cell lysate corresponding to 2% (40 $\mu$ g) of the amount processed in the co-IP assay was also included in the gels.