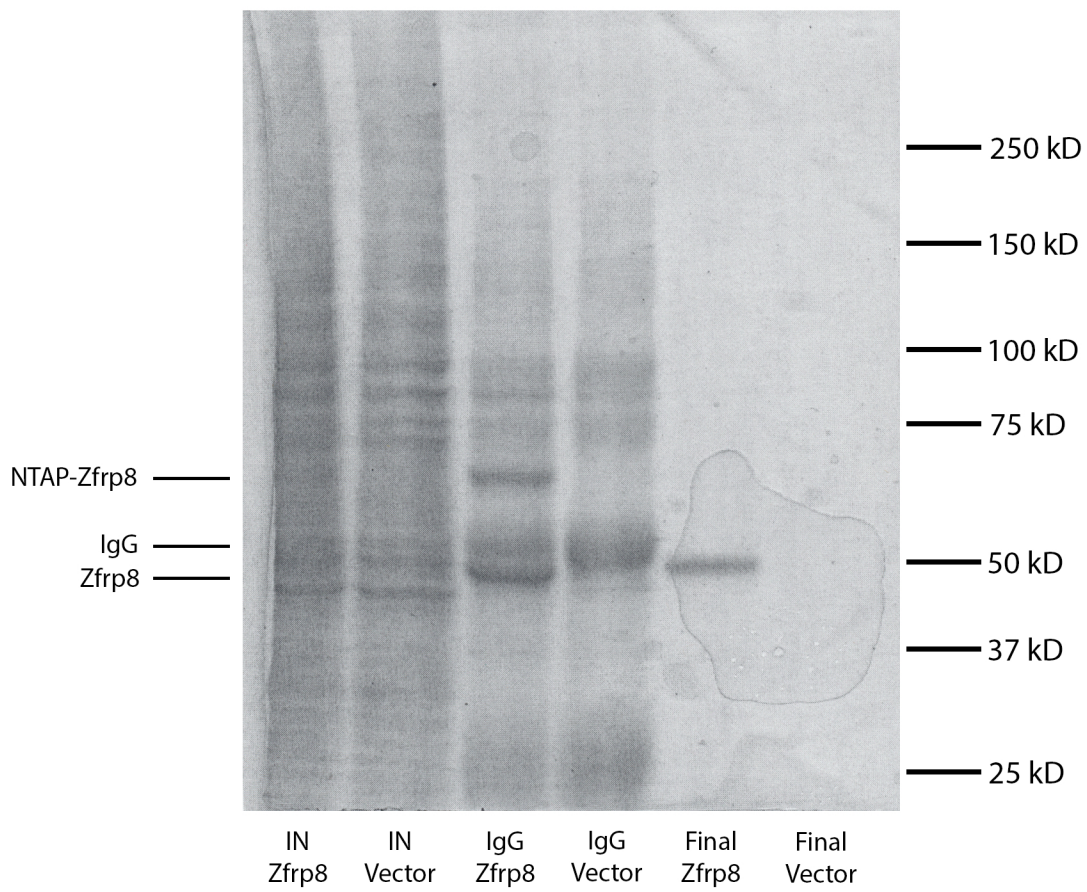
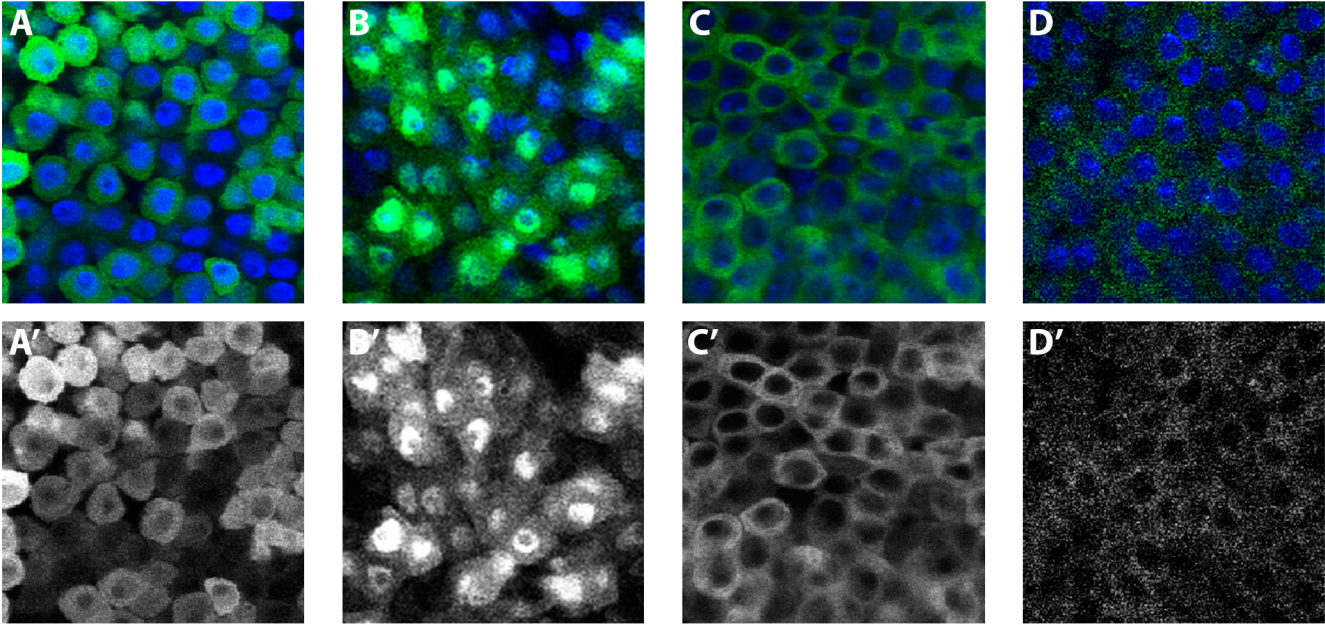


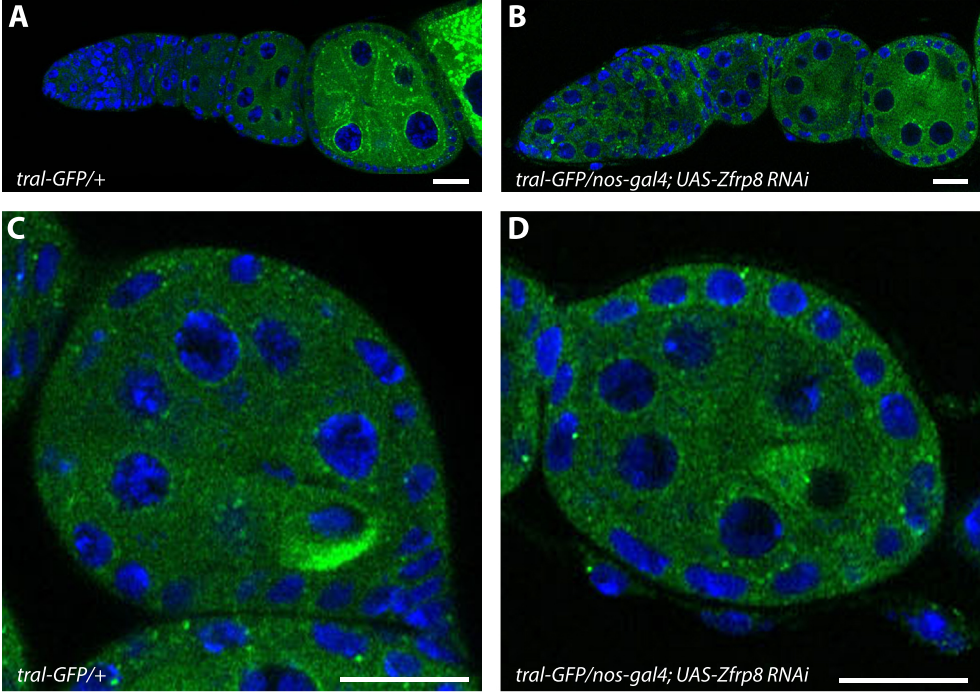
Supplemental Figure 1



Supplemental Figure 2



Supplemental Figure 3



DNA Tral-GFP

Supplemental Table 1: PDCD2 interactors identified by yeast-two hybrid screen of a mESC library

Symbol	Protein	Drosophila Ortholog	# of Clones Identified
Alms1	Alstrom syndrome 1 homolog		1
Atp1b3	ATPase, Na+/K+ transporting, beta 3 polypeptide	Nervana 1	1
	Developmental pluripotency-associated protein 4		1
Ibtk	Inhibitor of Bruton agammaglobulinemia tyrosine kinase	CG8060	1
Ipo9	Importin-9	Ranbp9	1
Kans12	KAT8 regulatory NSL complex subunit 2	Dim y-tubulin 1	1
Nmd3	60S ribosomal export protein NMD3	Nonsense-mediated mRNA 3	1
Nufip1	Nuclear fragile-X mental retardation protein-interacting protein 1	Nufip	3
Pcmt2	Protein-L-isoaspartate O-methyltransferase domain containing 2	Protein-L-isoaspartate O-methyltransferase	1
Ppm1d	Protein phosphatase 1D	Protein phosphatase 2C	2
Rbm39	RNA binding motif protein 39	CG11266	1
Rnf2	E3 ubiquitin-protein ligase RING2	Sex combs extra	1
Rpl12	60S ribosomal protein L12	Ribosomal protein L12	1
Spg21	Spastic paraplegia 21 homolog		1
Stx7	Syntaxin 7	Syntaxin 7	1
Taf1b	TATA box-binding protein-associated factor 1B	TATA box-binding protein-associated factor RNA polymerase I subunit B	1
Tardbp	TAR DNA binding protein	TAR DNA-binding protein-43 homolog	1
Tet1	Methylcytosine dioxygenase TET1	CG43444	2
Zfp623	Zinc Finger Protein 623		1

Supplemental Table 2: Zfrp8 is required in the nucleus

Expressed Protein	Rescue	Adult Viability	Progeny Counted
GFP-Zfrp8	+	50%	n= 398
GFP-NLS-Zfrp8	+	56%	n= 424
GFP-NES-Zfrp8	-	<3%	n= 344
CD8-GFP-Zfrp8	-	<3%	n= 368
<i>Zfrp8</i> ^{null}	-	<3%	n= 100