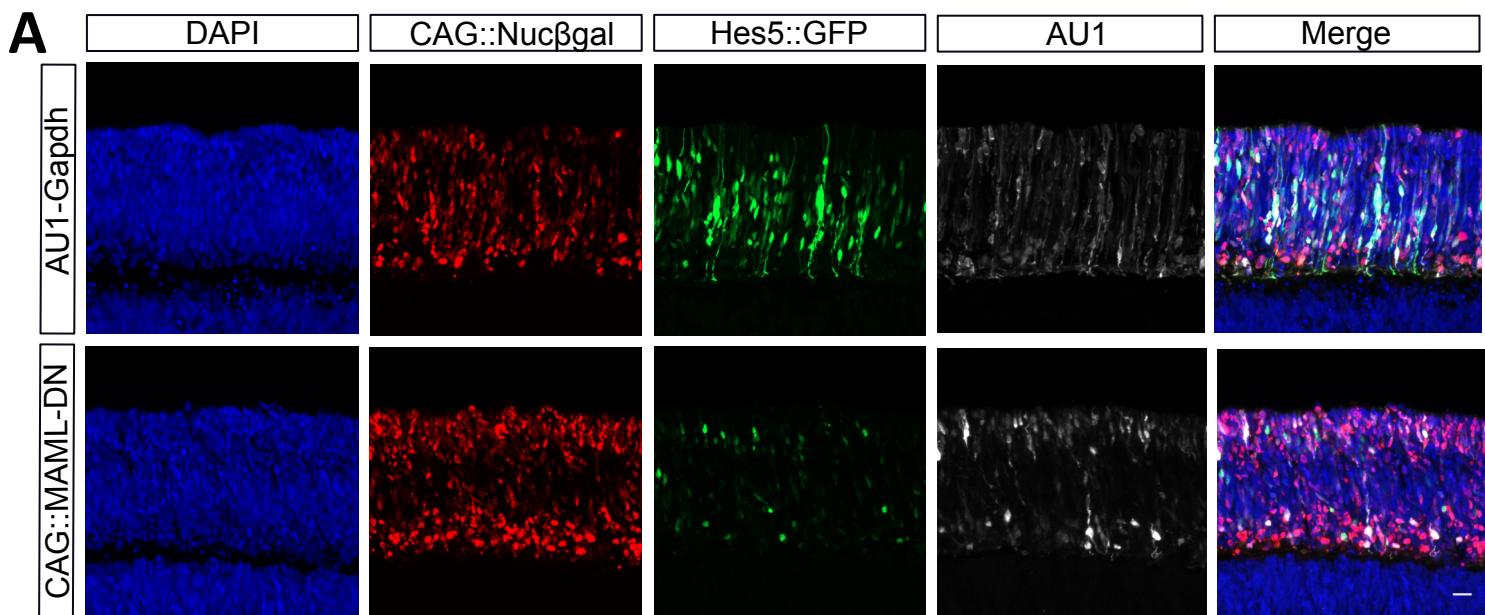


Fig. S1



B

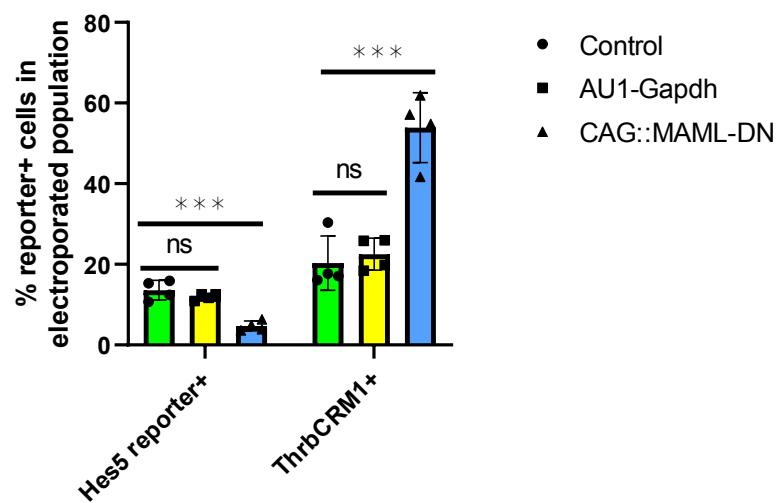
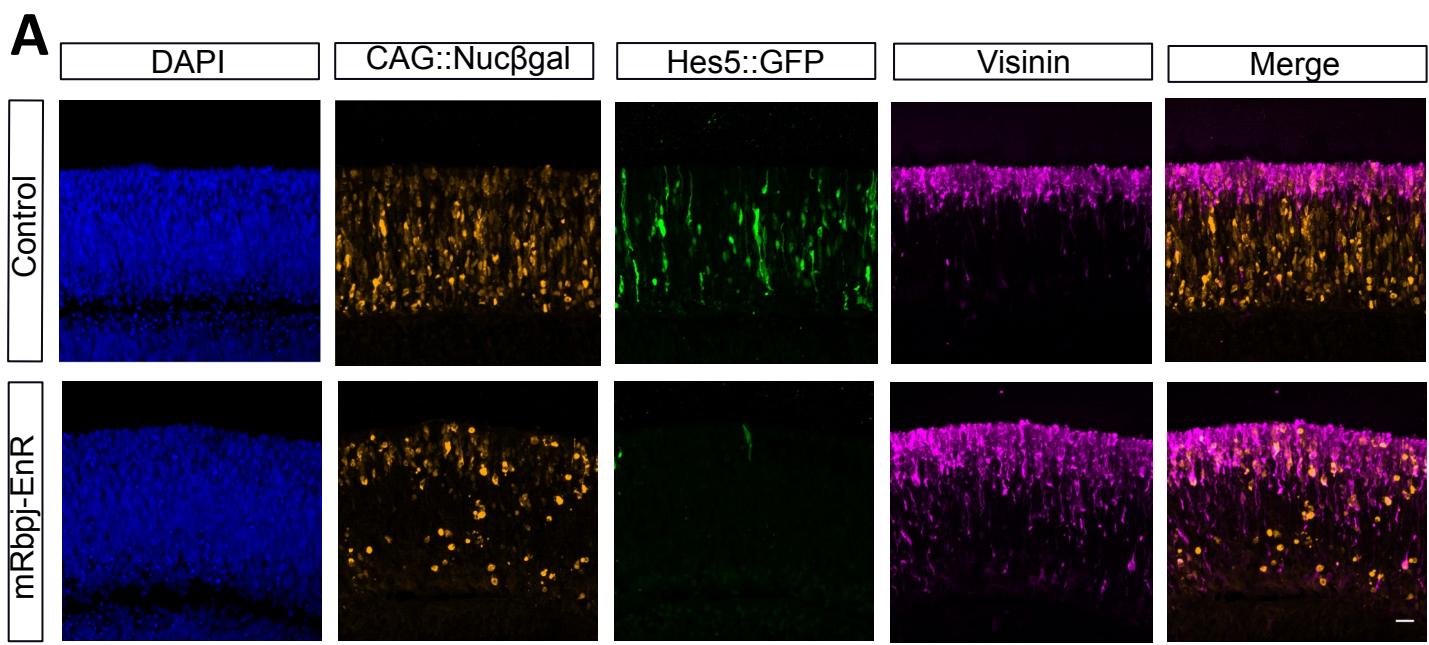
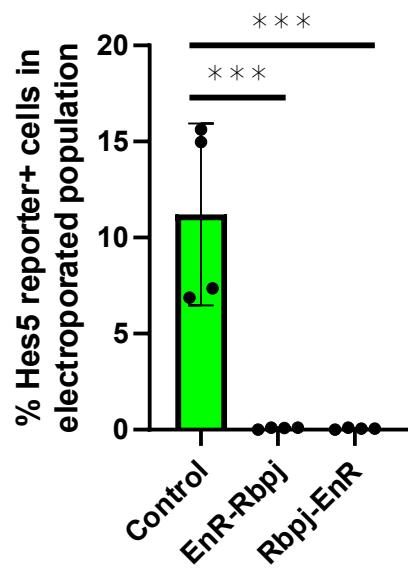


Fig. S2



B



C

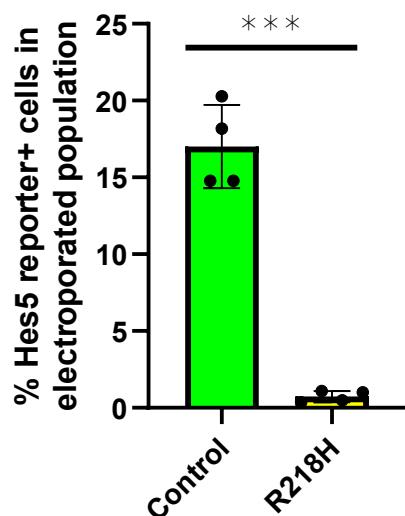
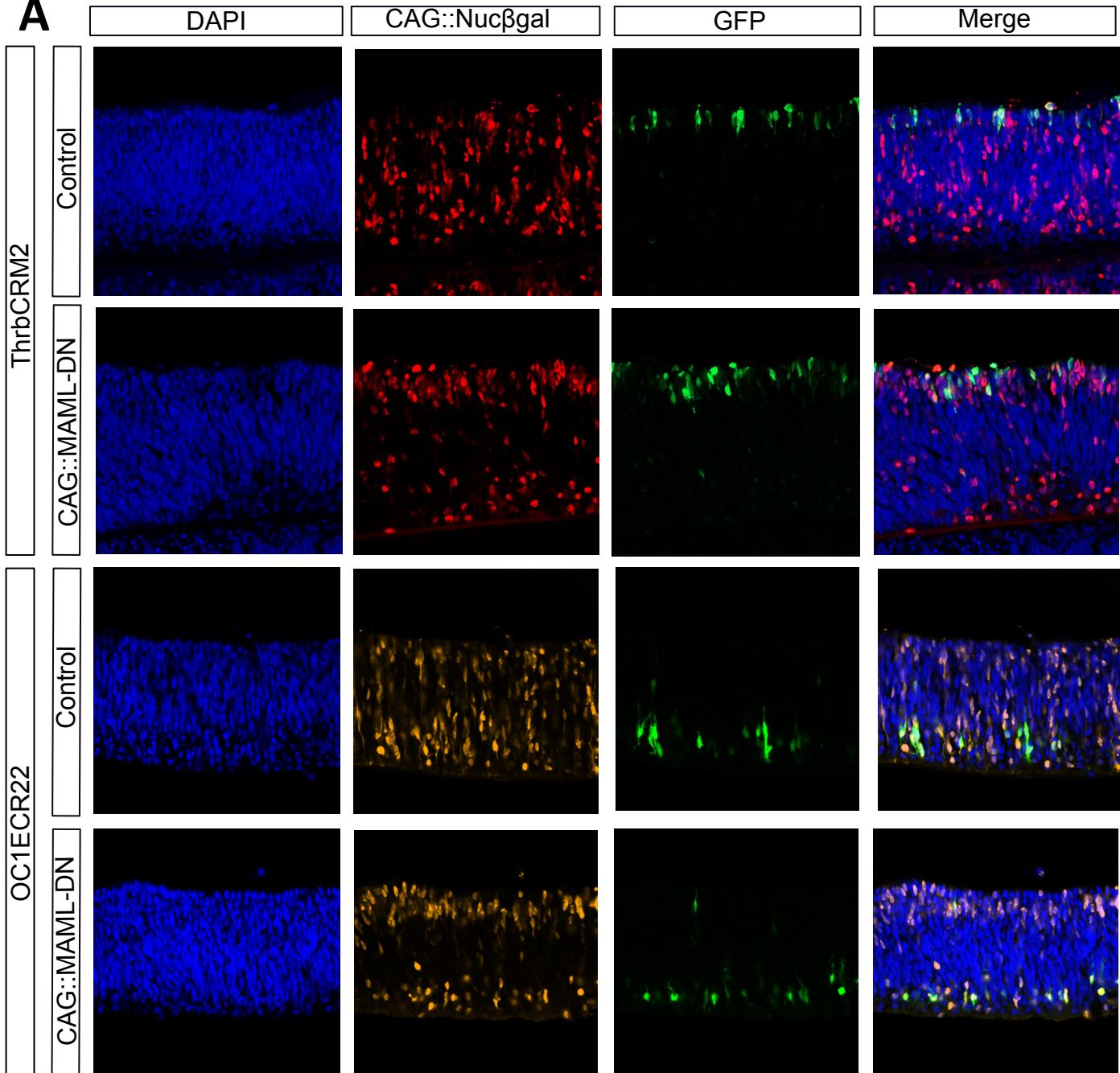


Fig. S3

A



B

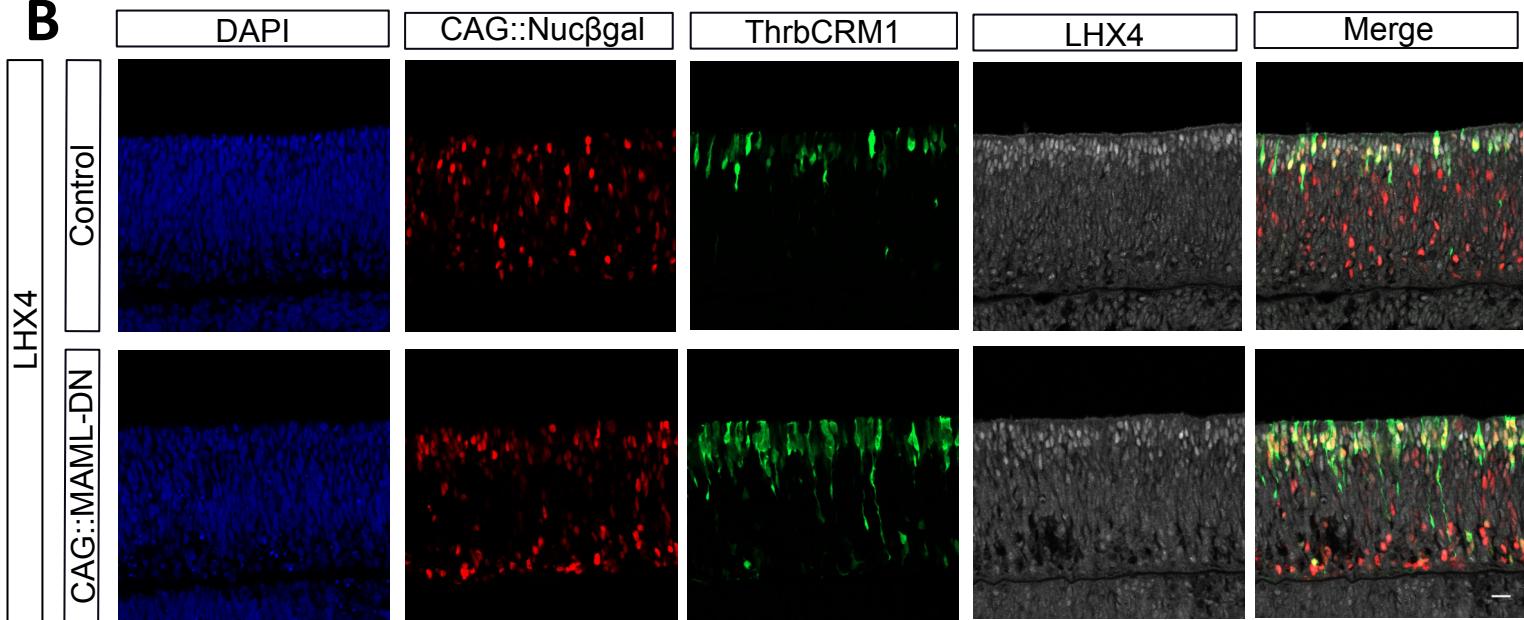
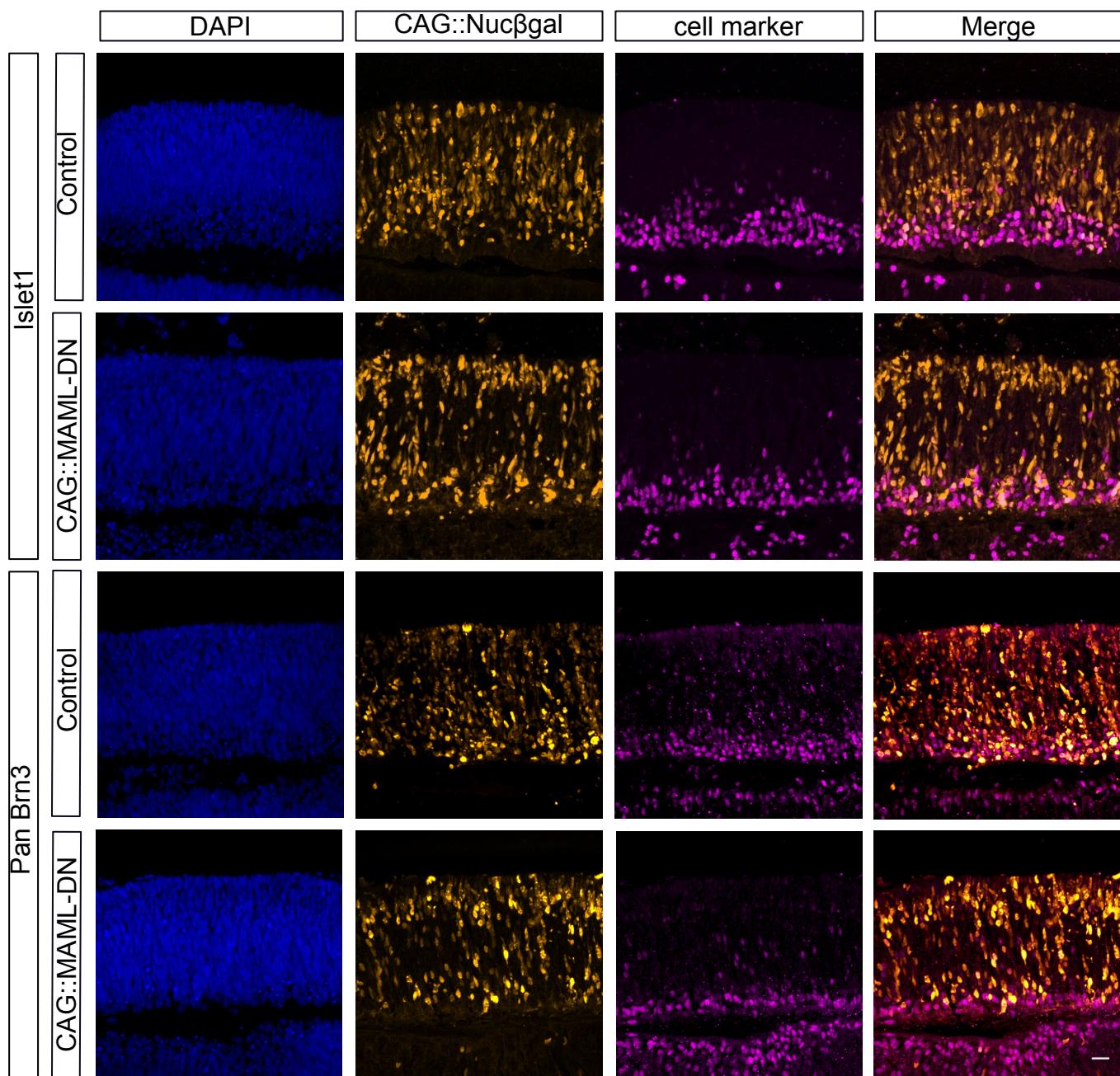


Fig. S4

A



B

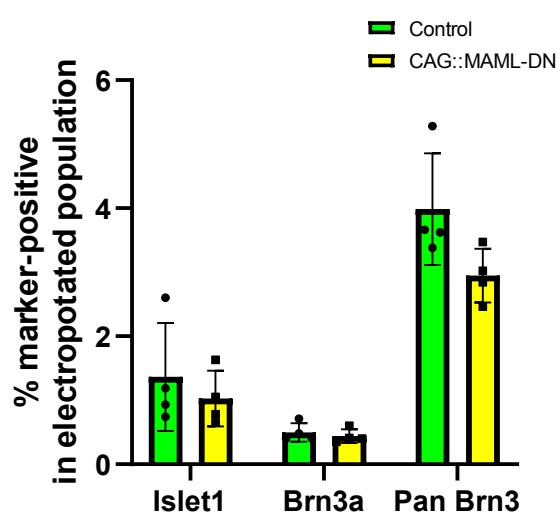
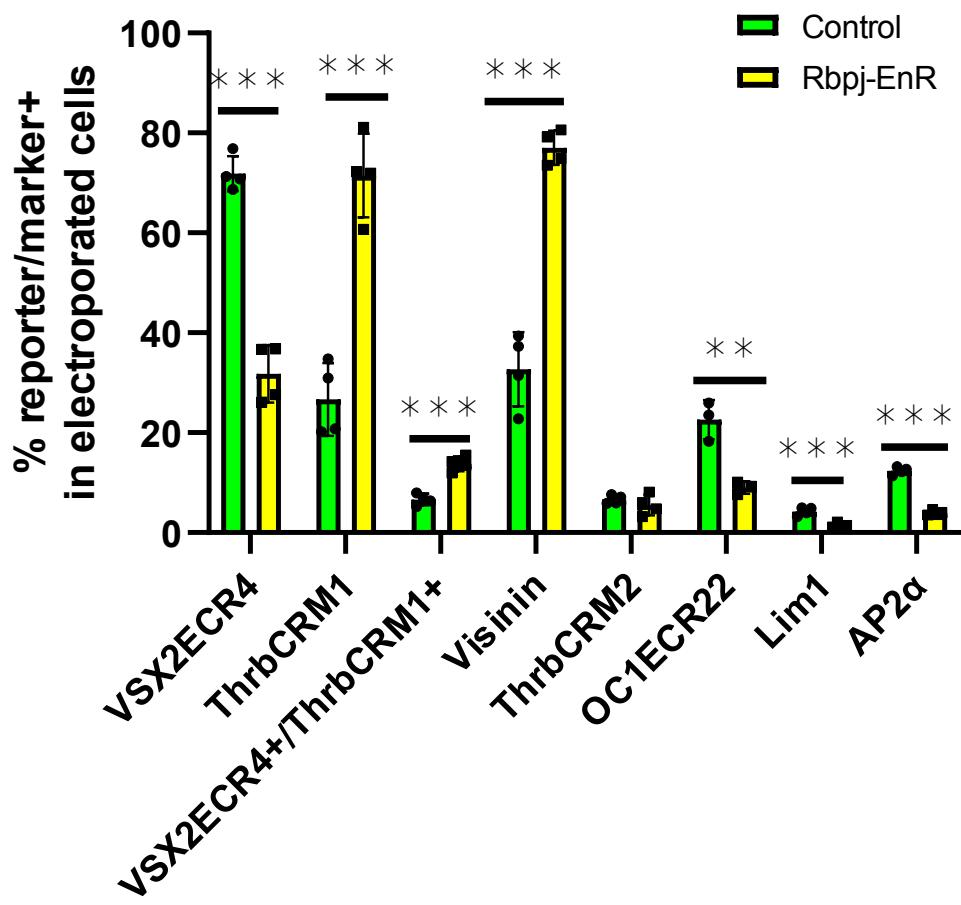


Fig. S5

A



B

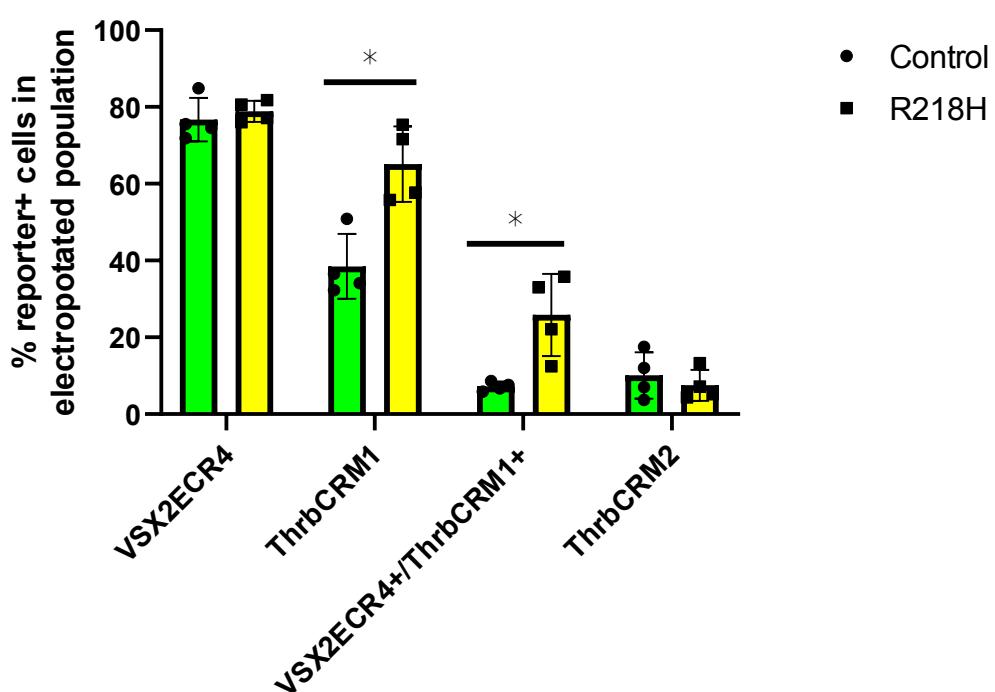


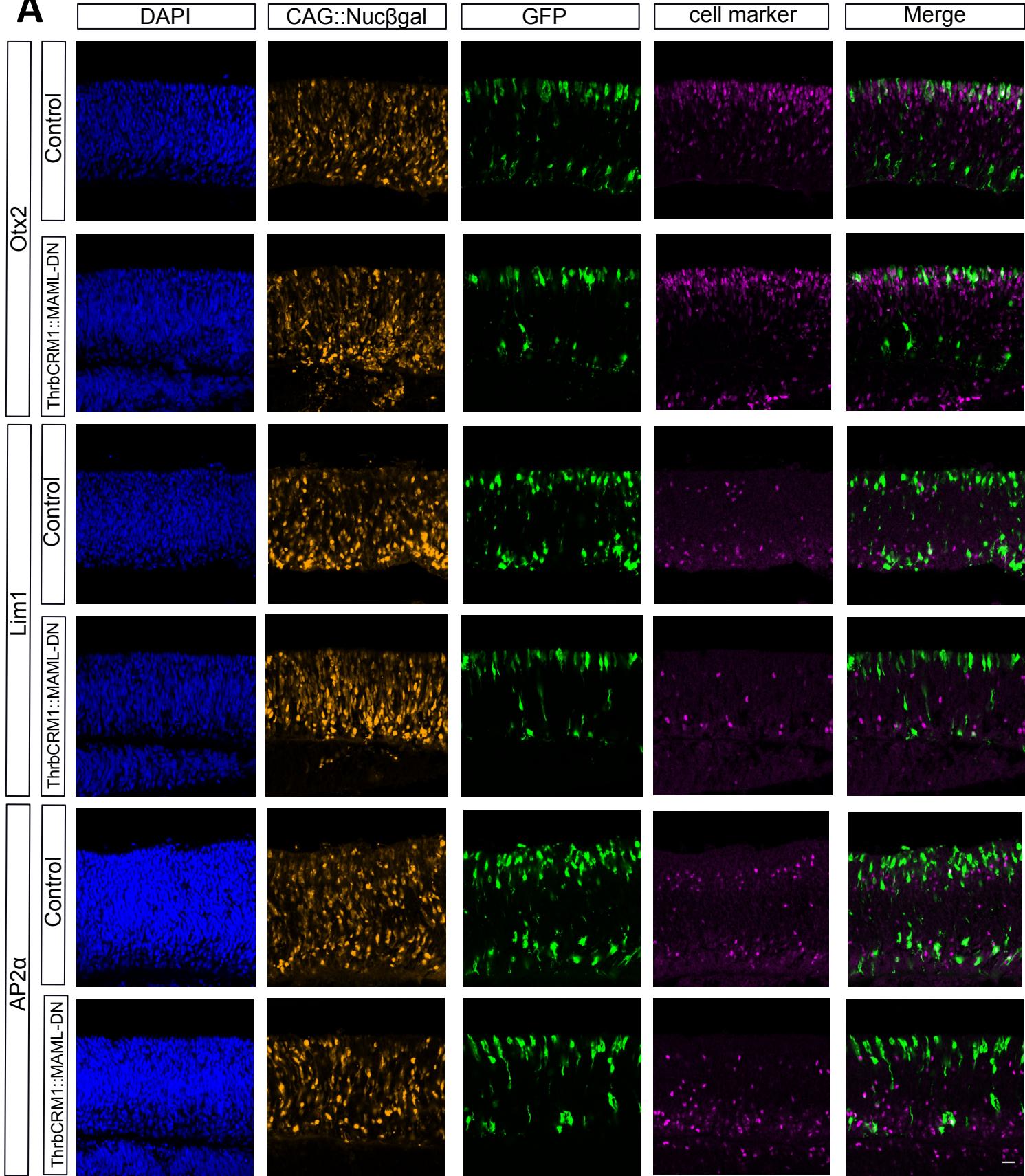
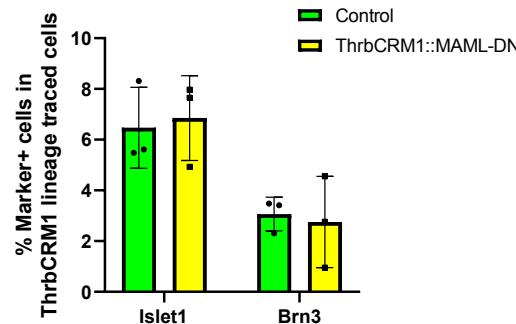
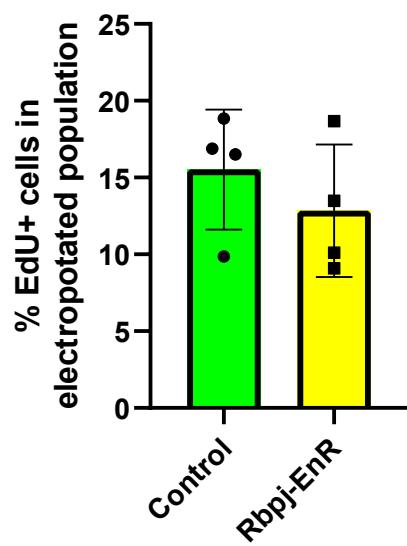
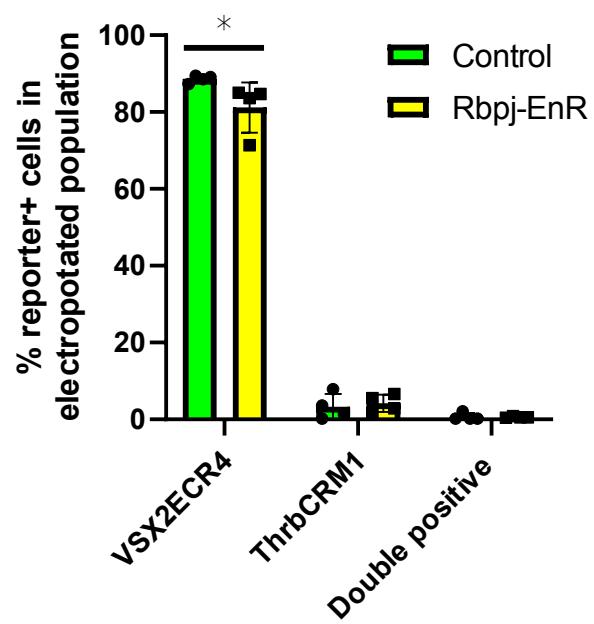
Fig. S6**A****B**

Fig. S7

A



B



Supplemental Table 1

Graphs	Groups	Replicate Control		Dominant negative		P value
		mean(%)	SD(%)	mean(%)	SD(%)	
Fig 1C	Hes5::GFP	1	9.76	2.27	2.60	2.00 0.0011
		2	12.43	3.07	5.03	2.13 0.0075
Fig 2B	VSX2ECR4	1	59.54	5.79	45.51	5.47 0.0124
		2	70.14	3.43	56.67	8.57 0.0266
ThrbCRM1		1	19.93	3.57	44.08	4.04 0.0001
		2	34.76	5.08	66.25	10.79 0.00186
ThrbCRM2		1	3.16	1.18	4.64	1.63 0.1924
		2	4.46	1.79	5.82	4.10 0.5658
OC1ECR22		1	8.00	1.09	8.15	0.67 0.8197
		2	7.68	2.32	7.33	2.25 0.835
VSX2ECR4/ThrbCRM1		1	4.91	1.42	23.96	3.78 0.0001
		2	2.12	0.35	11.76	6.96 0.02296
Fig 3B	Visinin	1	25.36	3.28	57.50	5.31 0.0001
		2	18.44	5.45	31.29	8.25 0.040814
Otx2		1	42.58	1.84	60.13	3.78 0.0002
		2	27.37	1.69	50.90	4.91 0.000101
Lim1		1	9.48	0.84	5.73	1.61 0.0062
		2	9.48	1.07	6.09	1.54 0.011107
AP2α		1	5.42	0.20	4.39	0.37 0.0011
		2	9.37	2.67	5.73	0.69 0.038258
Fig 4D	Visinin	1	74.00	3.81	74.41	3.54 0.8784
		2	81.77	8.56	89.56	5.79 0.182255
Otx2		1	79.85	3.02	78.42	4.38 0.6112
		2	59.5	9.97	58.99	3.37 0.925884
Lim1		1	17.43	4.06	11.15	0.68 0.0225
		2	11.22	1.25	8.89	0.52 0.013517
AP2α		1	15.97	1.23	11.86	0.53 0.001
		2	18.99	2.13	12.11	0.37 0.008971
OC1ECR22		1	17.03	1.79	10.31	2.09 0.0028
		2	11.98	1.08	9.74	0.38 0.007901
ThrbCRM2		1	9.42	2.19	16.26	5.63 0.1143
		2	5.46	4.68	5.16	2.8 0.918366
Fig 5A	EdU	1	11.04	2.99	8.69	2.04 0.2411
		2	17.33	3.89	15.28	1.74 0.373134
Fig 5E	ThrbCRM1/VSX2ECR4	1	4.90	1.78	21.51	7.61 0.0051
		2	3.37	0.29	16.49	6.76 0.008172
Fig 6B	VSX2ECR4	1	89.54	1.84	88.08	2.75 0.8857
		2	88.60	0.96	84.95	4.02 0.127968
ThrbCRM1		1	4.71	1.89	3.63	1.62 0.4183
		2	3.28	3.37	5.41	1.91 0.314541
Double positive		1	1.47	0.69	0.73	0.24 0.089
		2	0.68	0.95	1.4	0.83 0.298419
Fig 7B	VSX2ECR4+ 2d	1	60.55	13.83	58.11	17.61 0.8347
		2	60.06	8.52	61.67	9.04 0.803528
ThrbCRM2+ 2d		1	3.16	1.18	4.64	1.63 0.1924
		2	11.13	2.64	9.75	3.31 0.536373
Double positive 2d		1	0.54	0.14	1.38	1.17 0.2015
		2	1.48	0.41	1.81	0.69 0.434875
VSX2ECR4+ 3d		1	61.58	11.93	53.12	4.90 0.2371
		2	73.19	7.12	64.9	0.93 0.060466
ThrbCRM2+ 3d		1	11.71	7.47	13.26	2.01 0.7024
		2	20.98	3.86	21.77	2.82 0.752277
Double positive 3d		1	1.88	0.58	3.35	0.03 0.0023
		2	3.75	1.02	5.98	2.89 0.033892
Fig 7C	VSX2ECR4+ 4d	1	72.91	8.36	59.61	11.57 0.1117
		2	41.70	7.88	33.49	13.86 0.342527
ThrbCRM2+ 4d		1	23.66	16.06	61.00	8.23 0.0061
		2	15.26	4.89	33.62	3.5 0.000885
Double positive 4d		1	3.89	1.70	24.92	6.11 0.0006
		2	3.16	1.37	15.89	3.88 0.000823
VSX2ECR4+ 5d		1	78.12	8.64	72.52	19.23 0.6138
		2	84.87	8.17	72.69	6.86 0.062397
ThrbCRM2+ 5d		1	19.13	12.92	42.58	6.91 0.0186
		2	13.04	2.95	34.75	6.7 0.001028

	Double positive 5d	1	2.37	1.19	9.35	3.12	0.0058			
		2	2.19	0.63	12.07	5.44	0.011258			
Fig S5A	ThrbCRM1	1	26.69	7.31	71.49	8.37	0.0002			
		2	21.51	1.41	60.34	2.9	0.0001			
	ThrbCRM2	1	6.62	0.87	5.54	2.06	0.3707			
		2	8.39	2.41	5.94	0.96	0.177124			
	OC1ECR22	1	22.61	3.93	9.02	1.26	0.0047			
		2	19.02	1.57	15.21	2.04	0.025366			
Fig S5B	ThrbCRM1	1	38.48	8.45	65.12	9.82	0.0485			
		2	21.01	1.7	59.32	4.04	0.0286			
Fig S7A	EdU	1	15.53	3.91	12.85	4.31	0.3928			
		2	20.14	4.09	16.09	1.6	0.115312			
Graphs	Groups	Replicate	Control	Dominant negative1	P value1	Dominant negative2	P value2			
Fig 4A	ThrbCRM1		mean(%)	SD(%)	mean(%)	SD(%)	mean(%)	SD(%)		
		1	16.81	4.81	30.56	5.74	0.0011	17.37	0.30	0.3093
		2	14.10	1.82	25.21	3.37	0.0001	13.19	1.07	0.1532

Supplemental Table 1

Graphs	Groups	Replicate	Control		Dominant-negative		P-value
			mean(%)	SD(%)	mean(%)	SD(%)	
Fig 1C	Hes5::GFP	1	9.76	2.27	2.60	2.00	0.0011
		2	12.43	3.07	5.03	2.13	0.0075
Fig 2B	VSX2ECR4	1	59.54	5.79	45.51	5.47	0.0124
		2	70.14	3.43	56.67	8.57	0.0266
	ThrbCRM1	1	19.93	3.57	44.08	4.04	0.0001
		2	34.76	5.08	66.25	10.79	0.0019
	ThrbCRM2	1	3.16	1.18	4.64	1.63	0.1924
		2	4.46	1.79	5.82	4.10	0.5658
Fig 3B	OC1ECR22	1	8.00	1.09	8.15	0.67	0.8197
		2	7.68	2.32	7.33	2.25	0.8350
Fig 3B	VSX2ECR4 ThrbCRM1 double positive	1	4.91	1.42	23.96	3.78	0.0001
		2	2.12	0.35	11.76	6.96	0.0230
Fig 4D	Visinin	1	25.36	3.28	57.50	5.31	0.0001
		2	18.44	5.45	31.29	8.25	0.0408
	Otx2	1	42.58	1.84	60.13	3.78	0.0002
		2	27.37	1.69	50.90	4.91	0.0001
	Lim1	1	9.48	0.84	5.73	1.61	0.0062
Fig 5A		2	9.48	1.07	6.09	1.54	0.0111
	AP2α	1	5.42	0.20	4.39	0.37	0.0011
		2	9.37	2.67	5.73	0.69	0.0383
Fig 4D	Visinin	1	74.00	3.81	74.41	3.54	0.8784
		2	81.77	8.56	89.56	5.79	0.1823
	Otx2	1	79.85	3.02	78.42	4.38	0.6112
		2	59.5	9.97	58.99	3.37	0.9259
	Lim1	1	17.43	4.06	11.15	0.68	0.0225
		2	11.22	1.25	8.89	0.52	0.0135
Fig 5A	AP2α	1	15.97	1.23	11.86	0.53	0.0010
		2	18.99	2.13	12.11	0.37	0.0090
Fig 5A	OC1ECR22	1	17.03	1.79	10.31	2.09	0.0028
		2	11.98	1.08	9.74	0.38	0.0079
Fig 5A	ThrbCRM2	1	9.42	2.19	16.26	5.63	0.1143
		2	5.46	4.68	5.16	2.8	0.9184
Fig 5A	EdU	1	11.04	2.99	8.69	2.04	0.2411
		2	17.33	3.89	15.28	1.74	0.3731
Fig 5E	VSX2ECR4 ThrbCRM1 double positive	1	4.90	1.78	21.51	7.61	0.0051
		2	3.37	0.29	16.49	6.76	0.0082
Fig 6B	VSX2ECR4	1	89.54	1.84	88.08	2.75	0.8857
		2	88.60	0.96	84.95	4.02	0.1280
	ThrbCRM1	1	4.71	1.89	3.63	1.62	0.4183
		2	3.28	3.37	5.41	1.91	0.3145
Fig 6B	Double positive	1	1.47	0.69	0.73	0.24	0.0890
		2	0.68	0.95	1.4	0.83	0.2984
Fig 7B	VSX2ECR4+ 2d	1	60.55	13.83	58.11	17.61	0.8347
		2	60.06	8.52	61.67	9.04	0.8035
	ThrbCRM2+ 2d	1	3.16	1.18	4.64	1.63	0.1924
		2	11.13	2.64	9.75	3.31	0.5364
	Double positive 2d	1	0.54	0.14	1.38	1.17	0.2015
		2	1.48	0.41	1.81	0.69	0.4349
Fig 7B	VSX2ECR4+ 3d	1	61.58	11.93	53.12	4.90	0.2371
		2	73.19	7.12	64.9	0.93	0.0605
	ThrbCRM2+ 3d	1	11.71	7.47	13.26	2.01	0.7024
		2	20.98	3.86	21.77	2.82	0.7523
Fig 7B	Double positive 3d	1	1.88	0.58	3.35	0.03	0.0023
		2	3.75	1.02	5.98	2.89	0.0339
Fig 7C	VSX2ECR4+ 4d	1	72.91	8.36	59.61	11.57	0.1117
		2	41.70	7.88	33.49	13.86	0.3425
Fig 7C	ThrbCRM2+ 4d	1	23.66	16.06	61.00	8.23	0.0061

	2	15.26	4.89	33.62	3.5	0.0009				
Double positive 4d	1	3.89	1.70	24.92	6.11	0.0006				
	2	3.16	1.37	15.89	3.88	0.0008				
VSX2ECR4+ 5d	1	78.12	8.64	72.52	19.23	0.6138				
	2	84.87	8.17	72.69	6.86	0.0624				
ThrbCRM2+ 5d	1	19.13	12.92	42.58	6.91	0.0186				
	2	13.04	2.95	34.75	6.7	0.0010				
Double positive 5d	1	2.37	1.19	9.35	3.12	0.0058				
	2	2.19	0.63	12.07	5.44	0.0113				
Fig S5A	ThrbCRM1	1	26.69	7.31	71.49	8.37	0.0002			
		2	21.51	1.41	60.34	2.9	0.0001			
	ThrbCRM2	1	6.62	0.87	5.54	2.06	0.3707			
		2	8.39	2.41	5.94	0.96	0.1771			
OC1ECR22	1	22.61	3.93	9.02	1.26	0.0047				
	2	19.02	1.57	15.21	2.04	0.0254				
Fig S5B	ThrbCRM1	1	38.48	8.45	65.12	9.82	0.0485			
		2	21.01	1.7	59.32	4.04	0.0286			
Fig S7A	EdU	1	15.53	3.91	12.85	4.31	0.3928			
		2	20.14	4.09	16.09	1.6	0.1153			
			Control		Dominant-negative1		Dominant-negative2			
Graphs	Groups	Replicate	mean(%)	SD(%)	mean(%)	SD(%)	P value1	mean(%)	SD(%)	P value2
Fig 4A	ThrbCRM1	1	16.81	4.81	30.56	5.74	0.0011	17.37	0.30	0.3093
		2	14.10	1.82	25.21	3.37	0.0001	13.19	1.07	0.1532