

**Table S1. The Cyc pro-domain is required to ectopically induce gsc**

RNA injected at the one-cell stage	Dose (pg)	n	I (%)	II (%)	III (%)	IV (%)
Cyc+	0.5	120	64	36		
Cyc <sup>pro</sup>	0.5	86	100			
Cyc <sup>mat</sup>	0.5	88	100			
Cyc <sup>pro</sup> +Cyc <sup>mat</sup>	0.5	90	100			
Activin <sup>pro</sup> Cyc <sup>mat</sup>	0.5	92	100			
Sqt+	0.5	116	24	76		
Sqt <sup>pro</sup>	0.5	94	100			
Sqt <sup>mat</sup>	0.5	98	100			
hNODAL	0.5	128	88	12		
hNODAL <sup>pro</sup>	0.5	84	100			
hNODAL <sup>mat</sup>	0.5	86	100			
Cyc+	5	118	15	36	49	
Cyc <sup>pro</sup>	5	90	100			
Cyc <sup>mat</sup>	5	89	100			
Cyc <sup>pro</sup> +Cyc <sup>mat</sup>	5	90	100			
Activin <sup>pro</sup> Cyc <sup>mat</sup>	5	93	69	31		
Sqt+	5	106		12	58	30
Sqt <sup>pro</sup>	5	87	100			
Sqt <sup>mat</sup>	5	92	48	52		
hNODAL	5	106	44	56		
hNODAL <sup>pro</sup>	5	86	100			
hNODAL <sup>mat</sup>	5	90	88	12		
Cyc+	25	125		10	40	50
Cyc <sup>pro</sup>	25	94	100			
Cyc <sup>mat</sup>	25	96	100			
Cyc <sup>pro</sup> +Cyc <sup>mat</sup>	25	86	60	40		
Activin <sup>pro</sup> Cyc <sup>mat</sup>	25	95	53	37	10	
Sqt+	25	113	9	91		
Sqt <sup>pro</sup>	25	93	100			
Sqt <sup>mat</sup>	25	91	52	28	13	7
hNODAL	25	102	32	53	11	4
hNODAL <sup>pro</sup>	25	89	100			
hNODAL <sup>mat</sup>	25	88	30	33	37	

Zebrafish embryos injected with cyc, sqt or hNODAL mRNA at the one-cell stage were divided into four classes based on the expression pattern of gsc: endogenous gsc expression (I), mild (II) or massive (III and IV) expansion of the gsc expression domains. The dose of injected mRNA (pg), the total number of embryos examined (n) and the percentage of embryos (%) in each category are indicated.