

Table S2. Related to Figure 1 - area of compartment posterior of wing vein L5 in pixels

Wing Area	control	Psi RNAi 1
Biological replicates	30	72
Mean	76658	63374
SD	2140	4800
SEM	390.8	565.7

Table S3. Related to Figure 1 - wing hairs within fixed area of the central region of compartment posterior of wing vein L5 for Psi RNAi compared with control.

Wing Cell Size	control	Psi RNAi 1
Biological replicates	11	11
Mean	16.36	20.55
SD	0.67	1.57
SEM	0.2	0.47

Table S4. Related to Figure 3- area of compartment posterior of wing vein L5 in pixels for genotypes marked.

Wing Area	control	Psi RNAi 1	CDK8 RNAi	Psi RNAi 1 + CDK8RNAi	CycC RNAi	CycC RNAi + Psi RNAi 1
Biological replicates	30	72	21	23	21	26
Mean	76658	63374	78065	73900	77935	78448
SD	2140	4800	2075	2683	2712	3064
SEM	390.8	565.7	452.7	559.4	591.9	600.9

Table S5. Related to Figure 3 - qPCR for CDK8 in Psi RNAi, CDK8 RNAi, Psi RNAi + CDK8 RNAi wing discs compared with control. Y axis on graph shows relative fold change.

CDK8 qPCR	control	Psi RNAi 1	CDK8 RNAi	Psi RNAi 1 + CDK8 RNAi
Biological replicates	5	6	3	5
Mean	1	0.938	0.2057	0.2771
SD	0	0.1075	0.07323	0.1456
SEM	0	0.04388	0.04228	0.06513

Table S6. Related to Figure 3- area of compartment posterior of wing vein L5 in pixels for genotypes marked.

Wing Area	control	Psi RNAi 1	UAS MED4	UAS MED4 + Psi RNAi 1	UAS MED7	UAS MED7 + Psi RNAi 1
Biological replicates	30	72	24	22	24	23
Mean	76658	63374	80281	70916	73487	69362
SD	2140	4800	2314	2201	4193	3228
SEM	390.8	565.7	472.4	469.3	855.9	673.2

Wing Area	UAS MED17	UAS MED17 + Psi RNAi 1	UAS MED19	UAS MED19 + Psi RNAi 1	UAS MED20	UAS MED20 + Psi RNAi 1
Biological replicates	20	17	25	27	20	27
Mean	76087	70224	72698	63936	75017	67195
SD	2913	2381	3269	5371	3058	2731
SEM	651.5	577.4	653.8	1034	683.8	525.7

Wing Area	UAS MED30	UAS MED30 + Psi RNAi 1	UAS MED31	UAS MED31 + PsiRNAi 1
Biological replicates	26	25	22	26
Mean	75769	69992	82230	69485
SD	2782	2870	3537	3649
SEM	545.6	574	754.2	715.6

Table S7. Related to Figure 4- area of compartment posterior of wing vein L5 in pixels for genotypes marked.

Wing Area	control	Psi RNAi 1	UAS MYC	UAS MYC Psi RNAi 1	MYC RNAi	MYC RNAi Psi RNAi 1
Biological replicates	30	72	20	25	28	22
Mean	76658	63374	75810	73568	67116	59080
SD	2140	4800	1685	4004	3456	5390
SEM	390.8	565.7	376.9	800.8	653.1	1149

Table S8. Related to Figure 4- qPCR for Psi in Psi RNAi wing discs compared with control.

Psi qPCR	W1118	Psi RNAi 1	Psi RNAi 2	MYC RNAi
Biological replicates	6	6	3	5
Mean	1	0.1435	0.2708	1.325
SD	0	0.01942	0.1101	0.1084
SEM	0	0.007928	0.06354	0.04847

Table S9. Related to Figure 4 - qPCR for dMYC in Psi RNAi and dMYC RNAi wing discs compared with control.

dMYC qPCR	W1118	Psi RNAi 1	Psi RNAi 2	MYC RNAi
Biological replicates	3	3	3	3
Mean	1	0.576	0.8078	0.4629
SD	0	0.05405	0.06424	0.09364
SEM	0	0.0312	0.03709	0.05406

Table S10. Related to Figure 5 - area of compartment posterior of wing vein L5 in pixels for genotypes marked.

Wing Area	control	MYC RNAi	CDK8 RNAi	MYC RNAi + CDK8 RNAi	CyCC RNAi	MYCRNAi + CyCC RNAi
Biological replicates	30	28	84	67	21	34
Mean	76658	67116	78028	76274	77935	81062
SD	2140	3456	3052	2828	2712	2776
SEM	390.8	653.1	333	345.5	591.9	476

Wing Area	MED18 RNAi	MYC RNAi + MED18 RNAi	UAS MED 18	MYC RNAi + UAS MED18	UAS MED17	MYC RNAi + UAS MED17
Biological replicates	37	32	20	52	20	28
Mean	74947	66675	81512	83336	76087	84236
SD	2790	3132	3072	2280	2913	2307
SEM	458.6	553.7	686.9	316.2	651.5	435.9

Table S11. Related to Figure 6 - luciferase assays

Luciferase Assays	pLGB2	Full Length	E1A	VP16	PSI 1-591	PSI 1-610	PSI 1-676	PSI 1-705	PSI 1-729
Biological replicates	2	2	1	1	2	2	2	2	2
Mean	1	2.95	1.42	3.31	0.71	0.8	2.335	1.315	1.225
SD	0	0.3536	0	0	0.7778	0.297	0.7	0.8415	0.6576
SEM	0	0.25	0	0	0.55	0.21	0.495	0.595	0.465

Luciferase Assays	PSI 569-591	PSI 569-610	PSI 569-676	PSI 569-705	PSI 569-729
Biological replicates	2	2	2	2	2
Mean	0.75	3.38	21.03	6.36	10.95
SD	0.495	0.2404	0.3253	2.051	5.247
SEM	0.35	0.17	0.23	1.45	3.71

Table S12. Related to Figure 7 - % enrichment ChIP

Ser5 Pol II ChIP	wild type			Psi RNAi 1			wild type mock IP			Psi RNAi 1 mock IP		
Primers	% Input	SEM	n	% Input	SEM	n	% Input	SEM	n	% Input	SEM	n
MYC 1	1.1	0.26	4	0.64	0.13	4	0.086	0.0374	2	0.061	0.0204	2
MYC 2	4.8	0.5	4	2	0.3	4	0.066	0.0224	2	0.061	0.0264	2
MYC 3	2	0.50	4	1.3	0.26	4	0.068	0.0234	2	0.068	0.0314	2
MYC 4	1.7	0.34	4	1.3	0.34	4	0.068	0.0244	2	0.066	0.0384	2

Ser2 Pol II ChIP	wild type			Psi RNAi 1			wild type mock IP			Psi RNAi 1 mock IP		
Primers	% Input	SEM	n	% Input	SEM	n	% Input	SEM	n	% Input	SEM	n
MYC 2	1.00	0.00	3	0.60	0.15	3	0.05	0.019	3	0.03	0.006	3
MYC 3	0.82	0.021	3	0.51	0.09	3	0.07	0.025	3	0.04	0.009	3
MYC 4	0.76	0.059	3	0.46	0.07	3	0.06	0.02	3	0.04	0.007	3
MYC 3'UTR	0.61	0.081	3	0.42	0.05	3	0.05	0.02	3	0.04	0.006	3