File 5: 63 modules predicted by **Ahab using Gibbs-generated weight matrices** derived from hairy modules 5, 6 and 7 were examined for the presence of neighboring genes with blastoderm expression based on the BDGP/Celera genome annotation (Release 2) and the existing literature. The four genes closest to the module were examined, and the position of the module relative to the patterned gene is noted, including whether other genes are more proximal (up = upstream, down = downstream, intra = intragenic, 1 = closest gene, 2 = 2nd closest gene etc). The list also includes genes/regions that were hit more than once. The columns give the rank and score of each module, and indicate whether the module was recovered with any of the other methods (File 3A = Ahab 146, File 3B = Ahab – Tll, File 3C = Ahab window 700, File 5 = Gibbs on hairy + Ahab). Modules whose annotated binding sites were used to construct weight matrices via the customized Gibbs algorithm are marked by a star.

Rank	Score	Gene	Genomic organization	Comments	Rank in File				References
					3A	3B	3C	5	
1 *	42.16	hairy	up / 10.9 kb / 1		34	30	193	1	(1)
2 *	36.43	hairy	up / 9.2 kb / 1		1	1	3	2	(1)
3 *	31.43	hairy	up / 6.2 kb / 1		41	49	-	3	(1)
4 *	25.08	hairy	up / 10.4 kb / 1		34	30	193	4	(1)
5	22.58	hunchback	up / 3.3 kb / 1		129	-	37	5	(2)
7	21.91	abdominal-A	up / 83.2 kb/ 4	1: down 15.4 kb (Abd-B)	-	-	-	7	(3)
8	20.02	homothorax	intra		-	-	-	8	(4)
9	19.41	bxd/Ultrabithorax	up / 18.8 kb / 2	1: up 17.5 kb (Glut3)	-	-	-	9	(5, 6)
10	18.55	frizzled 2	up / 37.9 kb / 1		-	-	-	10	(7)
11	18.55	CG6559	up / 30 kb / 1		-	-	-	11	double hit, see module 44
16	17.76	hairy	up / 18.9 kb / 3	1: down 6.4 kb (CG6486) 2: up 8.1 kb (Arr2)	-	-	-	16	(1)
17	17.73	abdominal-A	up / -.2 kb / 1		-	-	-	17	(3)
21	17.43	abdominal-A	up / 35.8 kb / 2	1: up 14.8 kb (anon)	-	-	277	21	(3)
24	16.69	fd64A	up / 1.4 kb / 1		-	-	-	24	(8)
25	16.55	nubbin	up / 2.6 kb / 1		-	-	-	25	(9, 10)
31	16.10	empty spiracles	down / 2.2 kb / 1	2: up 16.6 (CG13897)	-	-	-	31	(11)
37	15.90	knirps	intra		-	-	136	37	(12)
39	15.72	CG6559	up / 45 kb / 1		-	-	-	39	double hit, see module 12
46	15.90	Btk29A	intra		-	-	-	46	(13, 14)

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