

Supplementary Table 2.

Position Weight Matrices (PMWs) used in Genome Surveyor. All of these PMWs were generated from B1H binding site data with the exception of Dstat.old (Yan et al. Cell 84, 1996 p421) and Ftz_f1.new (Ueda et al. Nucl. Acids Res. 19, 1991 p3689). Each row lists the base frequency from 5' to 3' in each site with the columns corresponding to A,C,G & T respectively. Additional homeodomain specificities will be described elsewhere (Noyes, Christensen, Wakabayashi, Stormo, Brodsky and Wolfe *manuscript in preparation*)

```
>bicoid.new.5 7
2 9 2 9
4 2 0 16
21 0 0 1
22 0 0 0
1 0 7 14
0 20 0 2
0 9 0 13
<
>caudal.new.4 7
3 2 3 30
1 0 0 37
8 0 2 28
37 0 1 0
3 0 0 35
3 0 9 26
18 0 19 1
<
>Dstat.old 9 PSEUDO_COUNT 1.0
0 0 0 30
0 0 0 30
0 30 0 0
2 21 4 3
4 14 11 1
3 4 20 3
0 0 30 0
30 0 0 0
30 0 0 0
<
>knirps.new.1 12
19 1 2 4
25 1 0 0
16 0 0 10
5 9 6 6
0 4 1 21
21 0 5 0
0 0 26 0
17 0 8 1
1 3 18 4
0 26 0 0
```

```
25  0  1  0
5   12 7  2
<
>kruppel.new.4 11
3   17  5  6
11  4  10 6
24  0  7  0
30  0  0  1
18  6  7  0
0   0  31 0
2   0  29 0
2   0  29 0
0   1  7  23
4   0  5  22
20  4  3  4
```

```
<
>tailless.new.1 10
20  4  4  5
29  0  4  0
33  0  0  0
31  1  1  0
0   0  33 0
0   2  0  31
0   33 0  0
33  0  0  0
31  0  1  1
17  10 2  4
```

```
<
>giant.new.5 10
28  5  25 2
0   0  0  60
1   1  3  55
54  0  6  0
0   53 0  7
7   0  53 0
0   6  0  54
55  3  1  1
60  0  0  0
2   25 5  28
```

```
<
>hunchback.new.4.8 8
21  5  0  0
26  0  0  0
26  0  0  0
26  0  0  0
26  0  0  0
26  0  0  0
26  0  0  0
```

```
2    19    0    5
<
>slp1.new.1    11
8     3    14   16
0     0     0   41
3     0    38    0
0     0     0   41
0     0     1   40
0     0     2   39
27    0     4   10
1    22     7   11
17    8    15    1
4    13     3   21
15    3     4   19
```

```
<
>nubbin.new.1  12
2     1     1   25
29    0     0    0
0     0     0   29
0     0    25    4
0    19     1    9
24    0     0    5
28    0     1    0
28    0     0    1
4     1     0   24
6     5     8   10
19    5     1    4
4     3    15    7
```

```
<
>dichaete.new.5    11
1     8     7   13
0    25     0    4
0    17     0   12
20   0     0    9
0     0     0   29
0     0     3   26
2     0    27    0
0     0     0   29
1     2     4   22
4    10     6    9
6     1     1   21
```

```
<
>hkb.new.1    9
3     0    18   11
8     0    24    0
0     0    32    0
0     0    32    0
0    32     0    0
```

0	0	32	0
0	0	3	29
0	0	31	1
24	3	2	3

<

>btd.new.6 10

14	3	7	6
10	0	20	0
4	0	18	8
2	0	28	0
0	0	30	0
0	0	30	0
2	28	0	0
0	0	30	0
0	0	20	10
15	1	10	4

<

>eve.new.6 6

1	0	0	21
22	0	0	0
22	0	0	0
0	2	1	19
0	2	11	9
17	0	4	1

<

>fkh.new.6 11

3	0	0	24
5	0	22	0
0	0	0	27
0	0	0	27
0	0	1	26
13	0	14	0
4	13	2	8
6	7	3	11
0	11	2	14
23	0	1	3
15	4	4	4

<

>ftz-f1.new.6 13

0	6	1	2
0	7	2	0
9	0	0	0
9	0	0	0
0	0	9	0
0	0	9	0
5	1	0	3
0	8	0	1
6	0	3	0

```
1 7 0 1
2 5 0 2
2 0 6 1
3 5 1 0
```

<

```
>ftz.new.6 6
1 0 0 17
18 0 0 0
18 0 0 0
0 0 0 18
0 0 9 9
14 0 4 0
```

<

```
>hairy.new.6 10 PSEUDO_COUNT 0
0.000000 0.027778 0.972222 0.000000
0.083333 0.194444 0.527778 0.194444
0.000000 1.000000 0.000000 0.000000
0.694444 0.000000 0.305556 0.000000
0.000000 0.972221 0.000000 0.027776
0.027777 0.000000 0.972222 0.000000
0.000000 0.305555 0.000000 0.694443
0.000000 0.000000 0.999999 0.000000
0.194443 0.527777 0.194443 0.083332
0.000000 0.972221 0.027777 0.000000
```

<

```
>odd.new.6 11
7 5 0 3
10 5 0 0
0 14 1 0
12 0 3 0
0 0 15 0
0 0 0 15
15 0 0 0
0 0 15 0
0 15 0 0
11 3 1 0
5 4 6 0
```

<

```
>opa.new.6 12
0 1 15 2
10 7 1 0
1 16 0 1
1 15 1 1
0 16 1 1
0 18 0 0
0 18 0 0
0 14 0 4
4 0 13 1
```

```
0    14    2    2
3    1     4   10
2    0    16    0
<
>prd.new.6    11
5     6     4   15
3    14     4    9
8    16     3    3
0     1    25    4
4     0     0   26
0    27     0    3
28    1     0    1
0    30     0    0
2     0    28    0
0    18    12    0
5     8     0   17
<
>run.new.6     9
0     9     0   22
1     0     0   30
0     0    31    0
0    23     1    7
0     1    30    0
0     0    31    0
0     2     0   29
1     2     0   28
15    0     3   13
<
>ttk.new.6     9
10    8     3    1
22    0     0    0
0     0    22    0
0     0    22    0
22    0     0    0
0     5     0   17
21    0     0    1
22    0     0    0
1     5     3   13
<
>AbdB         7
1     0     0   20
0     0     0   21
5     0     0   16
21    0     0    0
0     3     0   18
3     0    11    7
13    0     5    3
<
```

>Cad 7
3 3 3 29
4 0 0 34
12 0 2 24
38 0 0 0
0 0 0 38
4 0 7 27
22 0 15 1

<

>Abd-A 7
1 3 0 14
0 0 0 18
16 0 0 2
18 0 0 0
1 0 0 17
0 0 6 12
15 1 2 0

<

>Antp 7
1 1 0 14
0 0 0 16
16 0 0 0
16 0 0 0
0 0 0 16
0 0 9 7
15 0 1 0

<

>Dfd 7
1 4 3 16
0 0 0 24
24 0 0 0
24 0 0 0
0 0 0 24
1 0 19 4
21 0 3 0

<

>Eve 7
3 10 0 9
1 0 0 21
22 0 0 0
22 0 0 0
0 2 1 19
0 2 11 9
17 0 4 1

<

>Ftz 7
1 2 0 15
1 0 0 17

18	0	0	0
18	0	0	0
0	0	0	18
0	0	9	9
14	0	4	0
<			
>Lab	7		
1	3	0	12
0	0	0	16
16	0	0	0
16	0	0	0
1	0	0	15
0	0	6	10
16	0	0	0
<			
>Pb	7		
4	9	0	11
0	0	0	24
24	0	0	0
24	0	0	0
0	0	0	24
0	0	11	13
24	0	0	0
<			
>Scr	7		
3	7	0	15
0	0	0	25
25	0	0	0
25	0	0	0
0	0	0	25
0	0	18	7
23	0	2	0
<			
>Ubx	7		
0	0	0	20
0	0	0	20
17	0	0	3
20	0	0	0
0	0	0	20
0	0	6	14
14	0	6	0
<			
>Bcd	6		
0	0	0	22
20	0	0	2
22	0	0	0
0	0	1	21
0	22	0	0

0	21	0	1
<			
>Gsc	6		
0	0	0	22
22	0	0	0
22	0	0	0
0	0	0	22
0	22	0	0
0	14	2	6
<			
>Oc	6		
0	0	0	19
19	0	0	0
19	0	0	0
0	0	2	17
0	19	0	0
0	17	1	1
<			
>Ems	7		
3	7	1	9
3	0	0	17
19	0	0	1
19	0	1	0
0	0	0	20
0	1	10	9
14	0	6	0
<			
>En	7		
2	8	2	11
0	0	0	23
23	0	0	0
23	0	0	0
0	0	0	23
0	0	2	21
13	0	10	0
<			
>Inv	7		
1	9	0	6
0	0	0	16
16	0	0	0
16	0	0	0
0	0	0	16
0	0	0	16
11	0	5	0
<			
>Optix	5		
0	5	0	22
0	0	27	0

27	0	0	0
0	0	0	27
26	0	1	0
<			