

File 2: Experimentally known binding sites and weight matrix construction for the gap genes

File 2: For each transcription factor (bicoid, caudal, dorsal, hunchback, knirps, Kruppel, tailless, torRE) the following data are shown:

- (1) the frequency matrix obtained by running WCONSENSUS
- (2) the alignment of the binding sites from the same WCONSENSUS run
- (3) the experimental binding site data. The heading for each site contains the annotated transcript ID (CT number), gene ID (CG number), and gene name. The last number corresponds to the distance of the site to 10000 bases upstream of translation start of that gene.

BICOID

A	2	5	3	27	30	0	1	3	4	2	6
C	10	12	0	0	0	0	29	13	15	9	14
G	10	4	0	3	0	7	0	3	11	13	6
T	8	9	27	0	0	23	0	11	0	6	4

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 TCTAATCTCGC
 CTTAAGCTCGC
 CGTAATCTGCT
 TTTAATCCGTT
 AATAATCCAGC
 CTTAATCACCA
 TTAAATCCCTC
 GTTAATCTCCG
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 GTTAATCCGTT
 AATAATCTCGC
 TATAATCGCAC
 GCTAATCCCAG
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 TCTAATCCAGA
 TCTAATCCCTT
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 GCTAAGCTCCC
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 CCTAAGCCAGC
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G	14	4	0	0	0	0	5	8	25	7	10	4
T	0	39	42	42	43	42	24	20	9	14	19	13

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KNIRPS

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C	0	1	3	0	5	2	14	13	3	0	0	12	0	11	1
G	7	8	12	13	4	0	1	7	8	9	10	1	10	5	5
T	15	7	1	5	0	7	1	3	14	4	0	1	7	4	2

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KRUPPEL

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C	3	1	2	6	0	0	2	0	2
G	7	0	0	1	20	16	15	2	0

T | 0 0 1 1 0 0 0 18 18

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GAAGGGATT
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AAACGGGTT
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TAILLESS

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C	8	2	2	1	3	1	17	2	3
G	0	2	1	0	15	5	0	1	2
T	0	15	16	14	0	3	2	17	15

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	CAUDAL													
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C	12	4	0	7	0	1	1	0	0	3	1	0	8	9
G	2	6	7	1	1	1	0	1	0	0	7	12	2	1
T	5	1	5	9	17	16	16	18	16	8	3	2	4	7

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 CGGATTTTACAACC
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DORSAL

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G	5	18	23	24	2	1	0	1	2	0	4	6	10
T	15	10	3	0	12	22	26	27	15	0	6	2	11

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TORSO RESPONSE ELEMENT

A	0	0	0	0	0	6	6	0	0	6	6
C	0	1	5	0	5	0	0	0	0	0	0
G	0	4	1	0	0	0	0	1	6	0	0
T	6	1	0	6	1	0	0	5	0	0	0

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 >CT3134:t11:CG1378 9418
 CGACAGTTGTTAATGAAGAGATA