Supplemental Data

Fig.1. **Molecular mass of DHMBP-1 determined by UV cross-linking and partial affinity purification. (A)** UV cross-linking. The nuclear extracts of embryo (Em) and SG were UV cross-linked with S1, and the complexes were separated by SDS-PAGE. The molecular marker is shown on the left. Two bands were observed, as indicated by the arrows on the right. After correction for bound oligonucleotide, the molecular mass for protein 1 is about 40 kDa, and for protein 2 is about 20 kDa. **(B)** DHMBP-1 binding activity of eluted fractions from DNA affinity column. Presence of DHMBP-1 in different fractions obtained by affinity column was checked using EMSA with labeled S1. N represents EMSA reaction with the loaded fraction, F represents the flow-through fraction, and the numbers on top represent the fractions eluted by different concentrations of KCl (0.1 to 2.0 M). **(C)** SDS/PAGE and silver staining of DHMBP-1 positive fraction. M represents the molecular mass markers. Lane 1 represents the nuclear extract purified by sephacryl S-300 column, and lane 2 represents the concentrated fraction from affinity column with high DHMBP-1 binding activity.

Fig.2. **Sequence comparison between POU-M1, POU-M2 and Har-POU**
Comparison of the deduced amino acid sequence of POU-M2, POU-M1, and Har-POU cloned from *H. armigera*. Asterisks show the identical amino acids. The POU specific- and homeo-domains are underlined. The 28 amino acids (amino acid 109-136 of POU-M2) which are various between POU-M1 and POU-M2 are specified by shaded black if more than two amino acids are the same in one position.

Fig.3. **DHMBP-2 enhanced the binding of DHMBP-1**. **(A)** Probe S1 was incubated with increasing amounts (μg) of nuclear protein extracts from SG of day 1 pupae. C, cytoplasm protein extract**. (B)** Probes S1, S7 and SC were incubated with 10 μg nuclear protein extracts from SG of day 1 pupae. pro, probe.

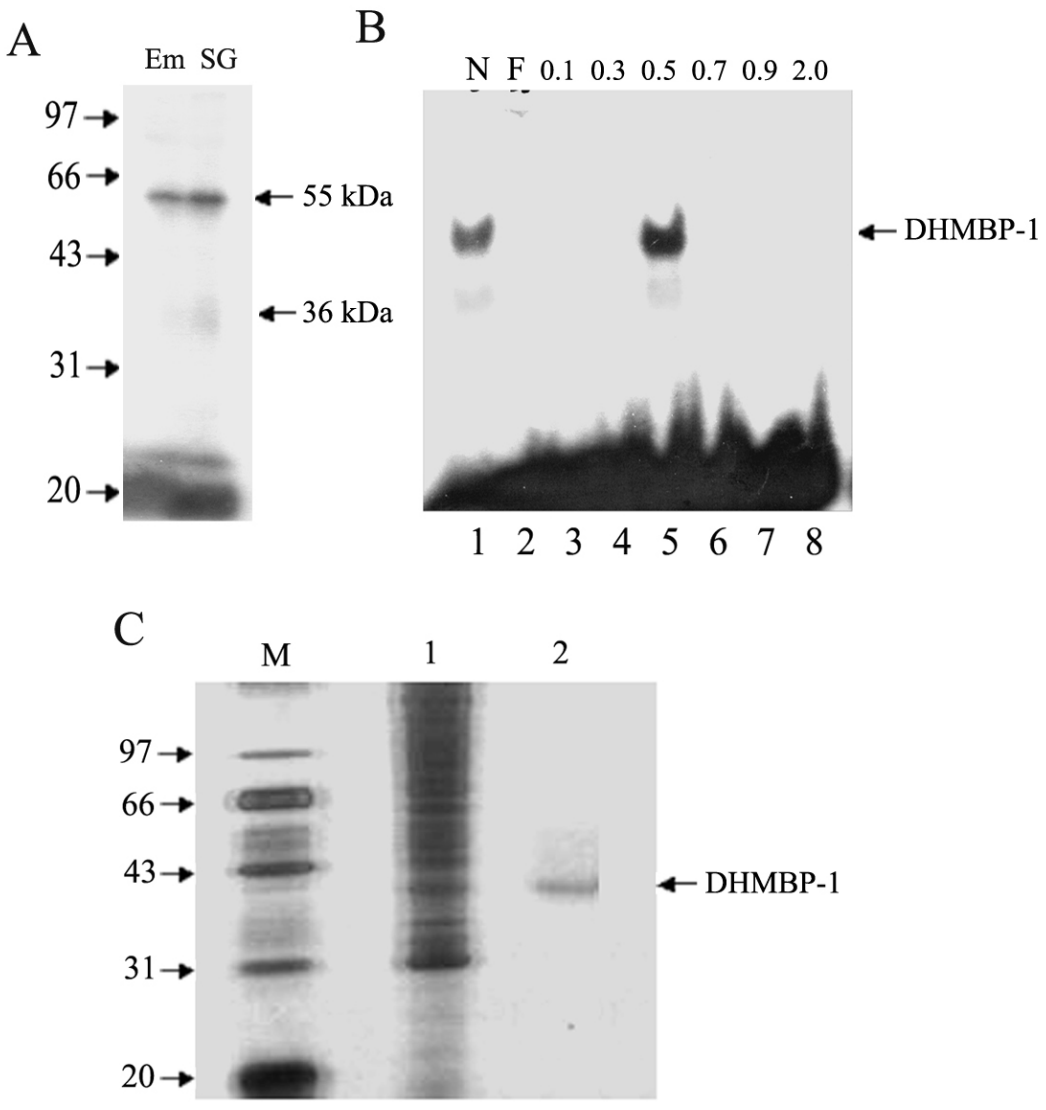
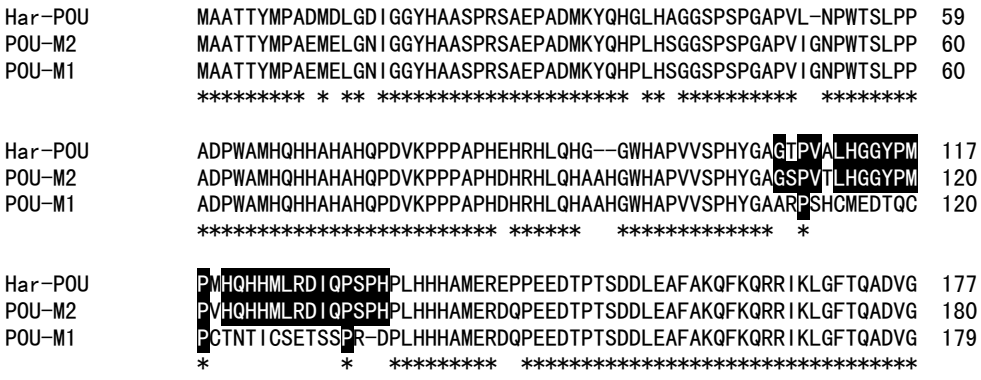

A
Em SG
97
66
43
31
20
55 kDa
36 kDa
B
N F 0.1 0.3 0.5 0.7 0.9 2.0
DHMBP-1
1 2 3 4 5 6 7 8
C
M 1 2
97
66
43
31
20
DHMBP-1

Figure 1


Har-POU MAATTYMPADMDLGDIGGYHAASPRSAEPADMKYQHGLHAGGSPSPGAPVL-NPWTSLPP 59
POU-M2 MAATTYMPAEMELGNIGGYHAASPRSAEPADMKYQHPLHSGGSPSPGAPVIGNPWTSLPP 60
POU-M1 MAATTYMPAEMELGNIGGYHAASPRSAEPADMKYQHPLHSGGSPSPGAPVIGNPWTSLPP 60
Har-POU ADPWAMHQHHAHAHQPDVKPPPAPHEHRHLQHG--GWHAPVVSPHYGAGTPVALHGGYPM 117
POU-M2 ADPWAMHQHHAHAHQPDVKPPPAPHDHRHLQHAAHGWHAPVVSPHYGAGSPVTLHGGYPM 120
POU-M1 ADPWAMHQHHAHAHQPDVKPPPAPHDHRHLQHAAHGWHAPVVSPHYGAARPSHCMEDTQC 120
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POU-M2 PVHQHHMLRDIQPSPHPLHHHAMERDQPEEDTPTSDDLEAFAKQFKQRRIKLGFTQADVG 180
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Figure 2

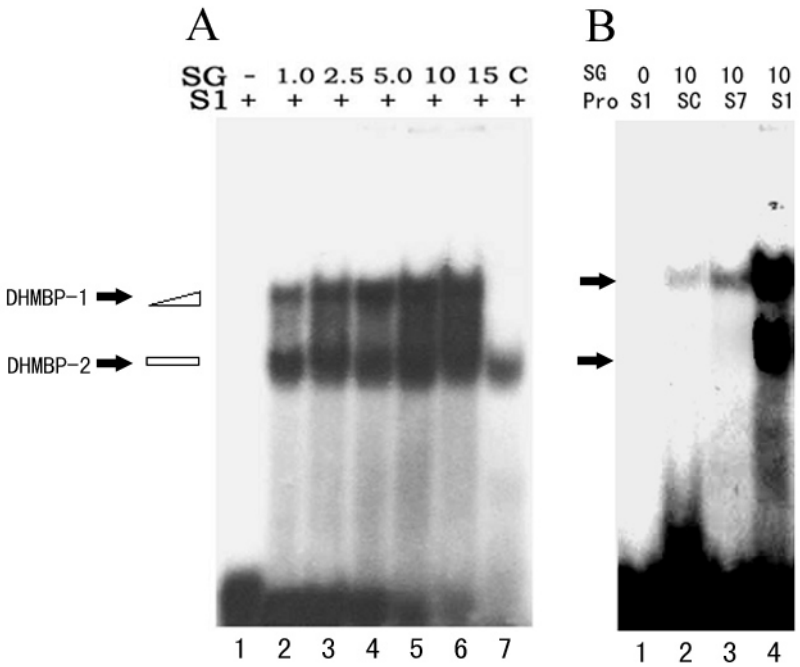
A
SG - 1.0 2.5 5.0 10 15 C
S1 + + + + + + +
DHMBP-1
DHMBP-2
1 2 3 4 5 6 7
B
SG 0 10 10 10
Pro S1 SC S7 S1
1 2 3 4

Figure 3