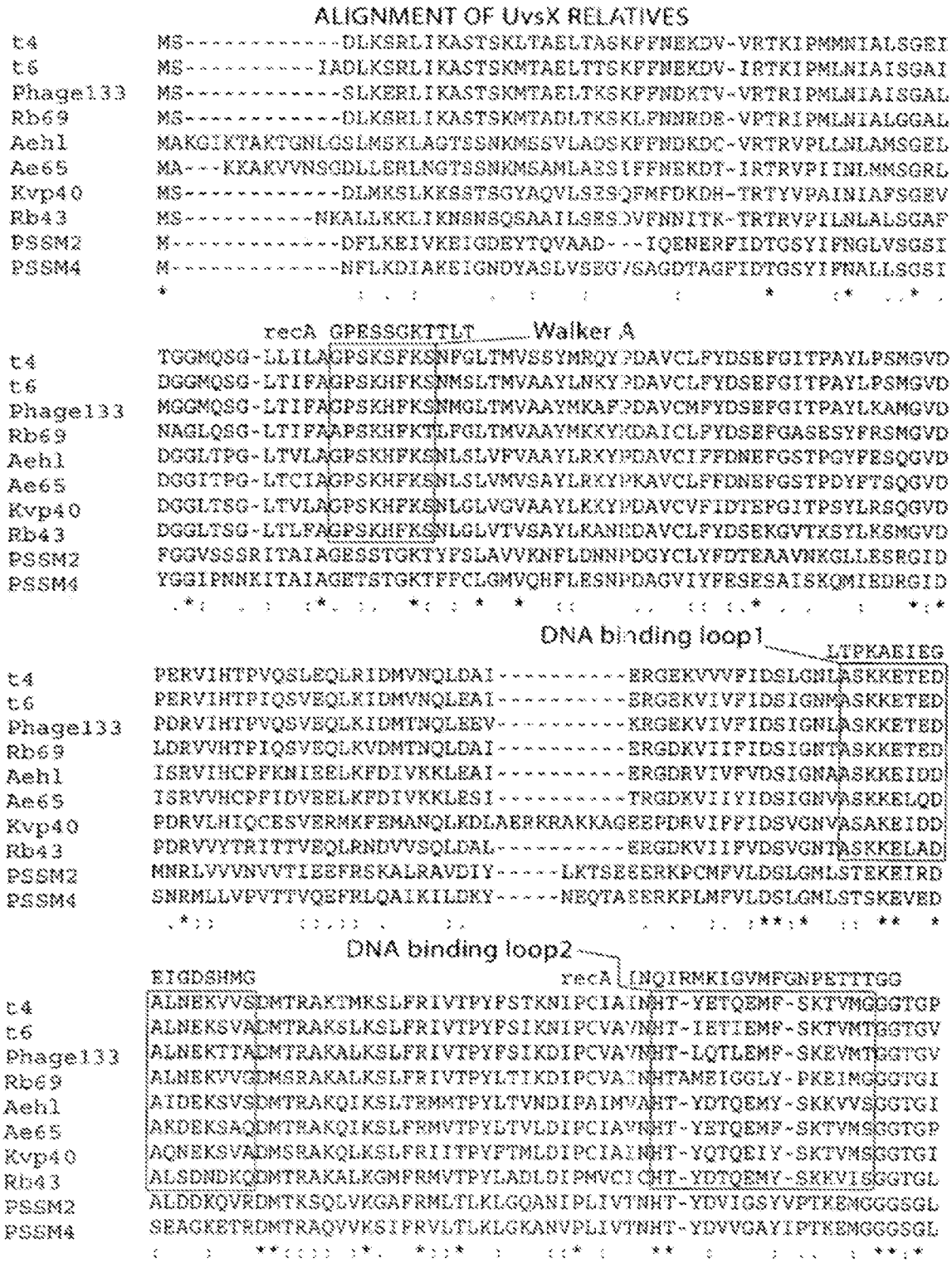
ALIGNMENT OF UvsX RELATIVES
recA GPESSGKTTLT
Walker A
DNA binding loop1
LTPKAEIEG
DNA binding loop2
recA INQIRMKIGVMFGNPETTTGG
t4
t6
Phage133
Rb69
Aeh1
Ae65
Kvp40
Rb43
PSSM2
PSSM4

Fig. 1A

ALIGNMENT OF UvsX RELATIVES
t4
t6
Phage133
Rb69
Aeh1
Ae65
Kvp40
Rb43
PSSM2
PSSM4

Fig. 1B

```
RB49    MS-VLEKLKKNSTLKTTAVLSKSSFFNEKTNTRTKIPMLNIAFSGDLKKGFQSGLIFFAGPSKHFK  65
T4      MSDLKSRLIKASTSKLTAELTASKFFNEKDVVRTKIPMMNIALSGEITGGMQSGLLILAGPSKSFK  66

RB49    SNMGLTCVSAYMKQNPDAACLFFDSEFGITSAYLESMGVDPDRVVHVPIKNIEELKFEIM  125
T4      SNFGLTMVSSYMRQYPDAVCLFYDSEFGITPAYLRSMGVDPERVIHTPVQSLEQLRIDMV  126

RB49    NQLEQITREDKVIIFIDSIGNLASKKEVEDAINEKSAQDMTRAKALKGLFRMVTPYLTMN  185
T4      NQLDAIERGEKVVVFIDSLGNLASKKETEDALNEKVVSDMTRAKTMKSLFRIVTPYFSTK  186

RB49    DIPCIAINHTYETQEMFSKTVMSGGTGAMYSANEVFIIGRRQQKEGTEITGYDFILNAEK  245
T4      NIPCIAINHTYETQEMFSKTVMGGGTGPMYSADTVFIIGKRQIKDGSDLQGYQFVLNVEK  246

RB49    SRTVKEKSKFEISVTFSGGIDPYSGLLELAVELGWVVKPSNGWYSRSILNTETGEMETEE  305
T4      SRTVKEKSKFEIDVKFDGGIDPYSGLLDMALELGFVVKPKNGWYAREFLDEETGEMIREE  306

RB49    RKFRAKETNSIEFWKPLLTNDKFNEAINDHYKLGQVISDEAVDKEIEDML  355
T4      KSWRAKDTNCTTFWGPLFKHQPFRDAIKRAYQLGAIDSNEIVEAEVDELI  356
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Fig. 2

100

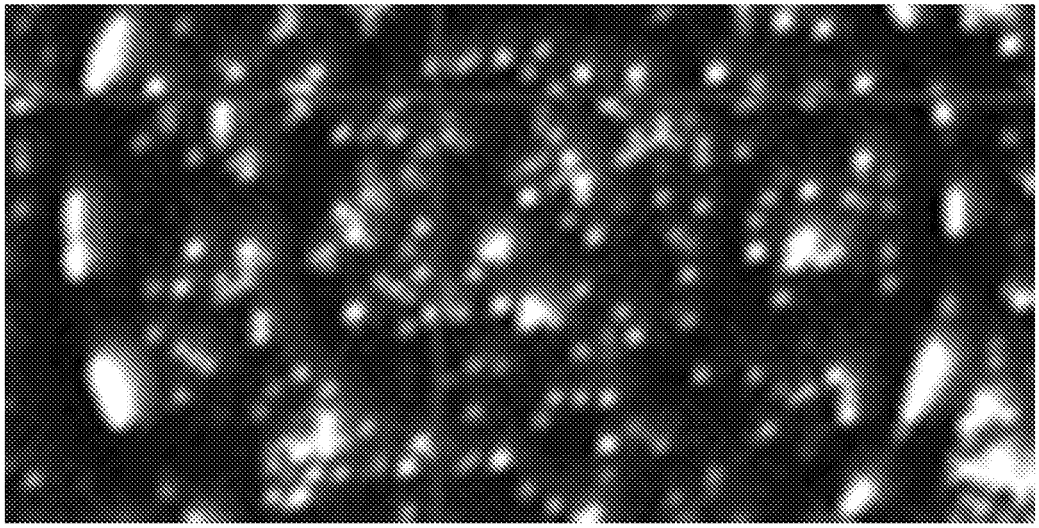

Figure 3A

150

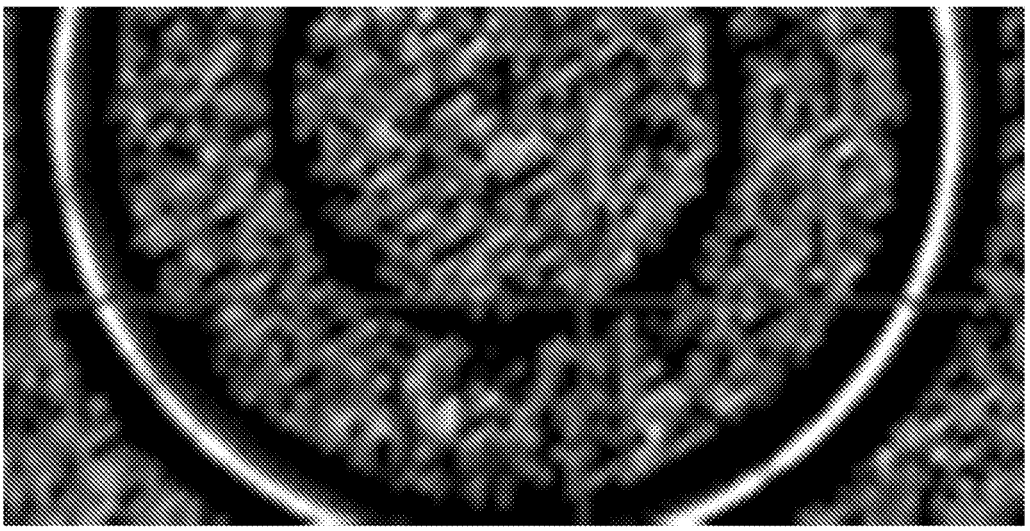

Figure 3B

200

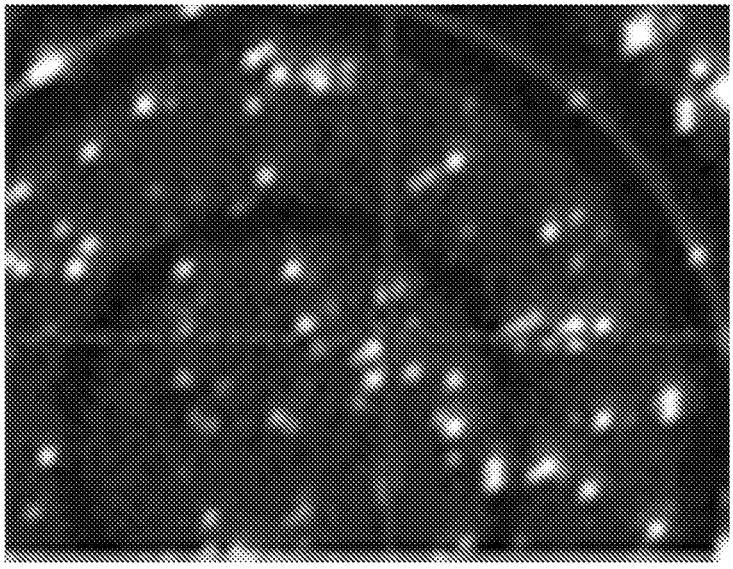

Figure 4A

250

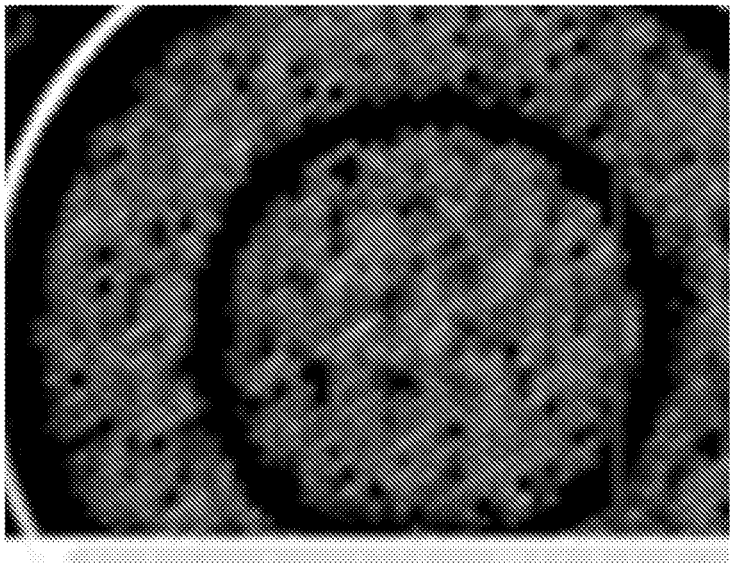

Figure 4B