FIG. 1

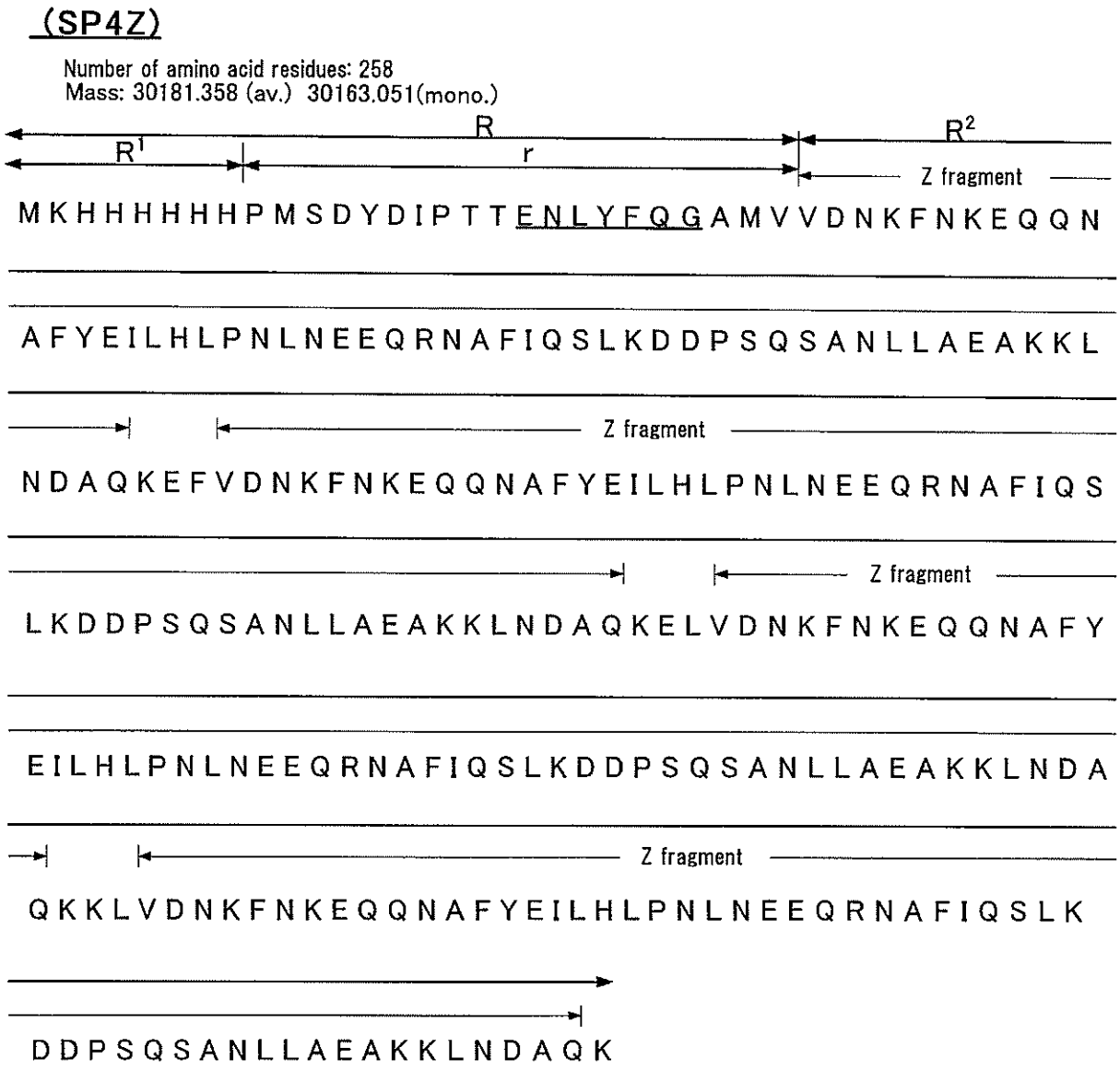

(SP4Z)
Number of amino acid residues: 258
Mass: 30181.358 (av.) 30163.051(mono.)
R
R1
r
R2
Z fragment
MKHHHHHHPMSDYDIPTTENLYFQGAMVVDNKFNKEQQN
AFYEILHLPNLNEEQRNAFIQSLKDDPSQSANLLAEAKKL
Z fragment
NDAQKEFVDNKFNKEQQNAFYEILHLPNLNEEQRNAFIQS
Z fragment
LKDDPSQSANLLAEAKKLNDAQKELVDNKFNKEQQNAFY
EILHLPNLNEEQRNAFIQSLKDDPSQSANLLAEAKKLNDA
Z fragment
QKKLVDNKFNKEQQNAFYEILHLPNLNEEQRNAFIQSLK
DDPSQSANLLAEAKKLNDAQK

FIG. 2

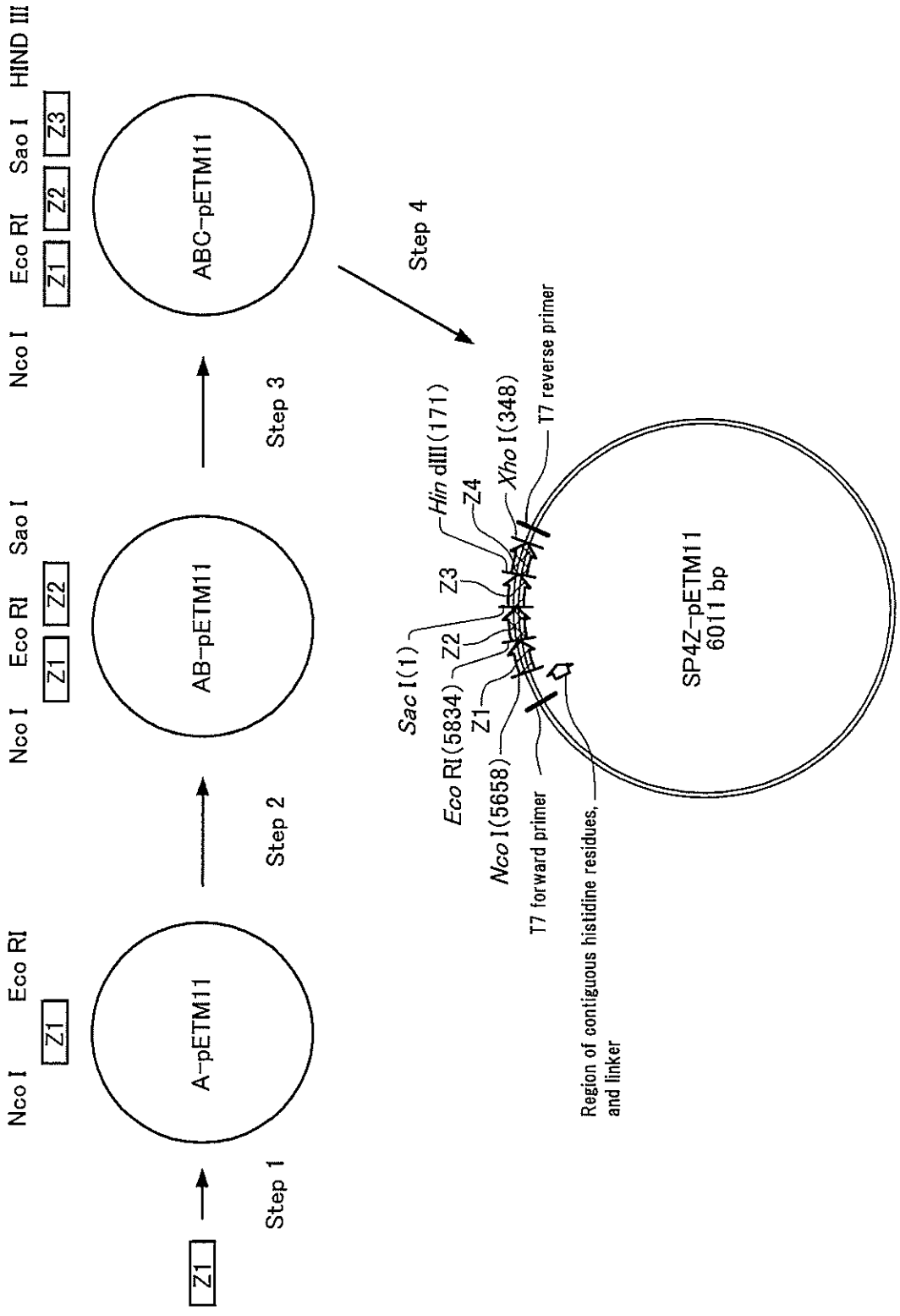
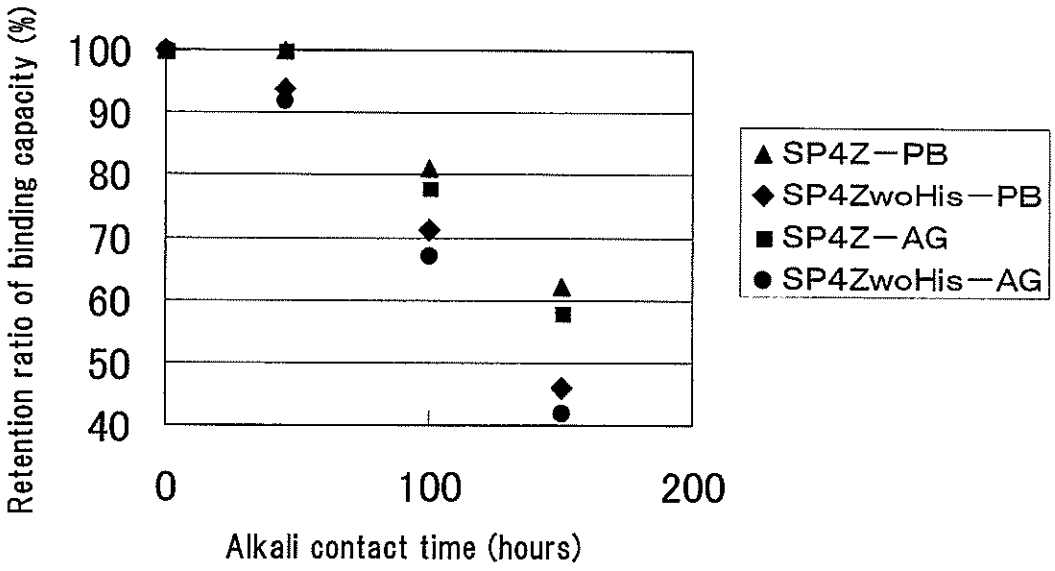

Nco I
Eco RI
Z1
A-pETM11
Step 1
Nco I
Eco RI
Sao I
Z1
Z2
AB-pETM11
Step 2
Nco I
Eco RI
Sao I
HIND III
Z1
Z2
Z3
ABC-pETM11
Step 3
Step 4
Sac I(1)
Eco RI(5834)
Nco I(5658)
Z1
Z2
Z3
Z4
Hin dIII(171)
Xho I(348)
T7 reverse primer
T7 forward primer
Region of contiguous histidine residues, and linker
SP4Z-pETM11
6011 bp

FIG. 3


Retention ratio of binding capacity (%)
100
90
80
70
60
50
40
0
100
200
Alkali contact time (hours)
SP4Z−PB
SP4ZwoHis−PB
SP4Z−AG
SP4ZwoHis−AG