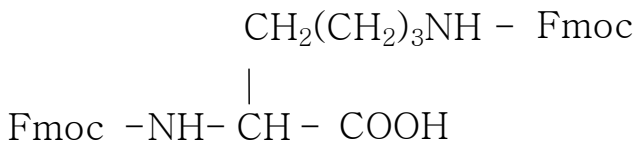
Figure 1

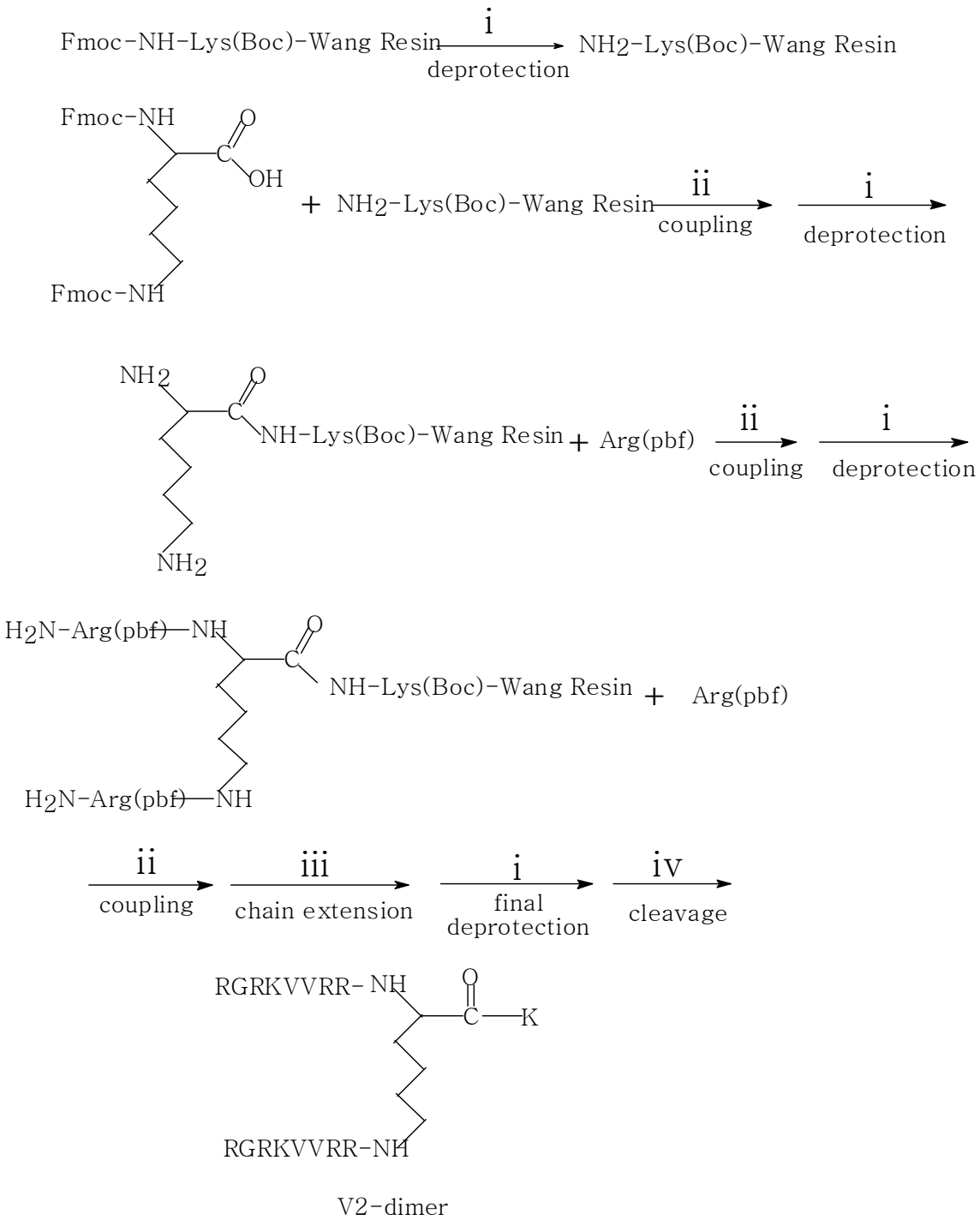


Lys (Fmoc)

RGRKVVRRKK V2 -monomer

(RGRKVVRR)2KK V2 –dimer

Figure 2



V2-dimer

Figure 3

RGRKVVRRKK V2-monomer

$(RGRKVVRR)_2KK$ V2-dimer

↓

$(RGRKVVRR)_4(K)_3K$ V2-tetramer

↓

$(RGRKVVRR)_8(K)_7K$ V2-Octamer

Figure 4

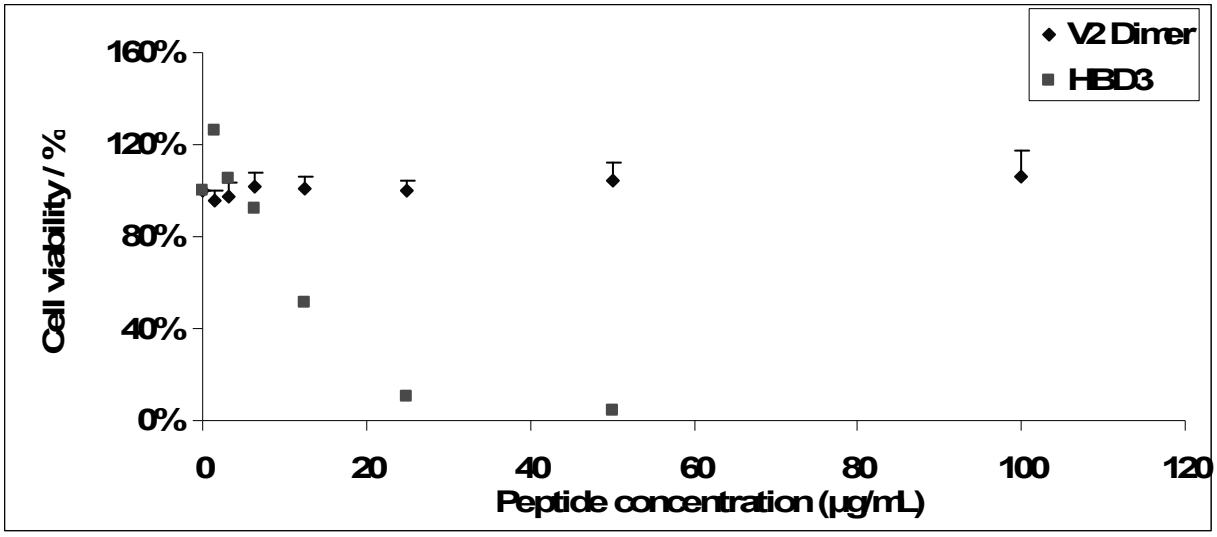


Figure 5

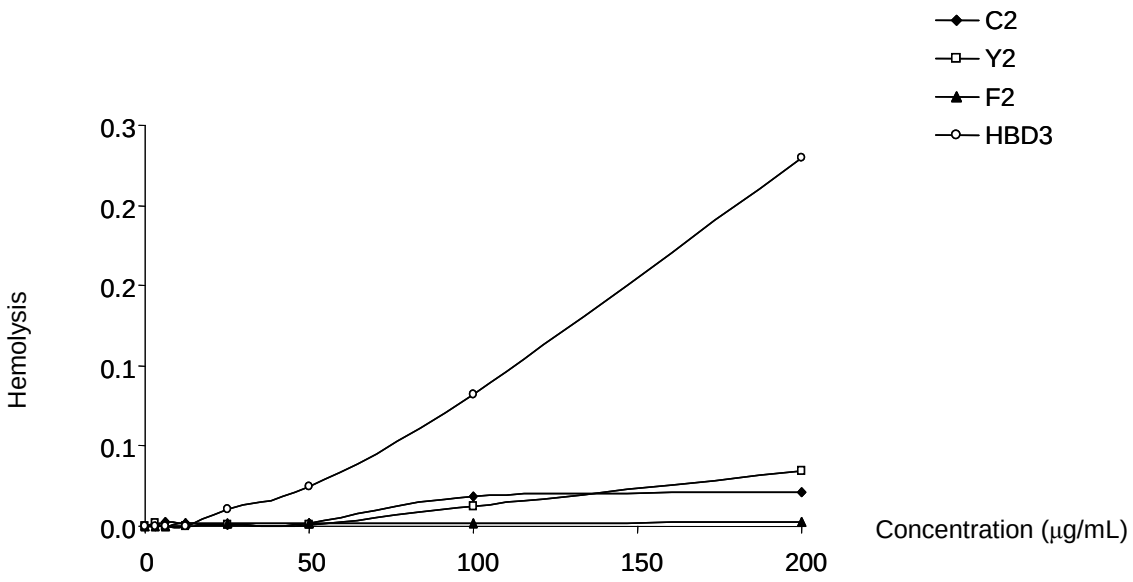

C2
Y2
F2
HBD3
Hemolysis
0.3
0.2
0.2
0.1
0.1
0.0
0
50
100
150
200
Concentration (μg/mL)

Figure 6

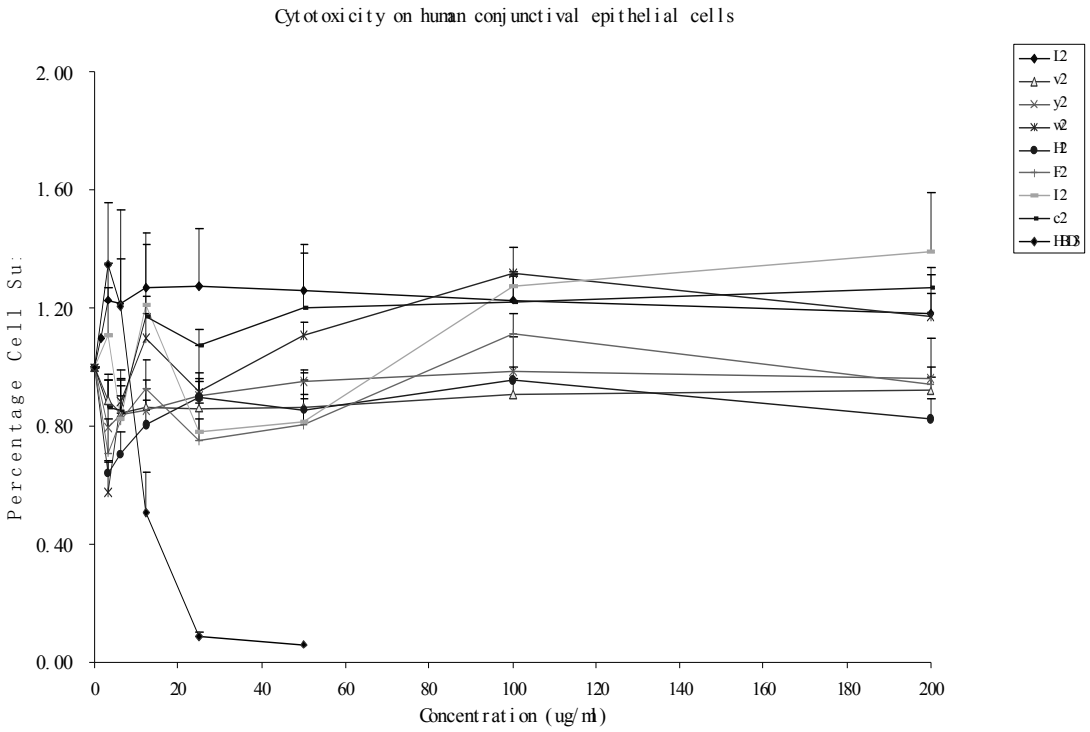

Cytotoxicity on human conjunctival epithelial cells
Percentage Cell Su
2.00
1.60
1.20
0.80
0.40
0.00
0
20
40
60
80
100
120
140
160
180
200
Concentration (ug/ml)
I2
v2
y2
w2
H2
F2
I2
c2

Figure 7

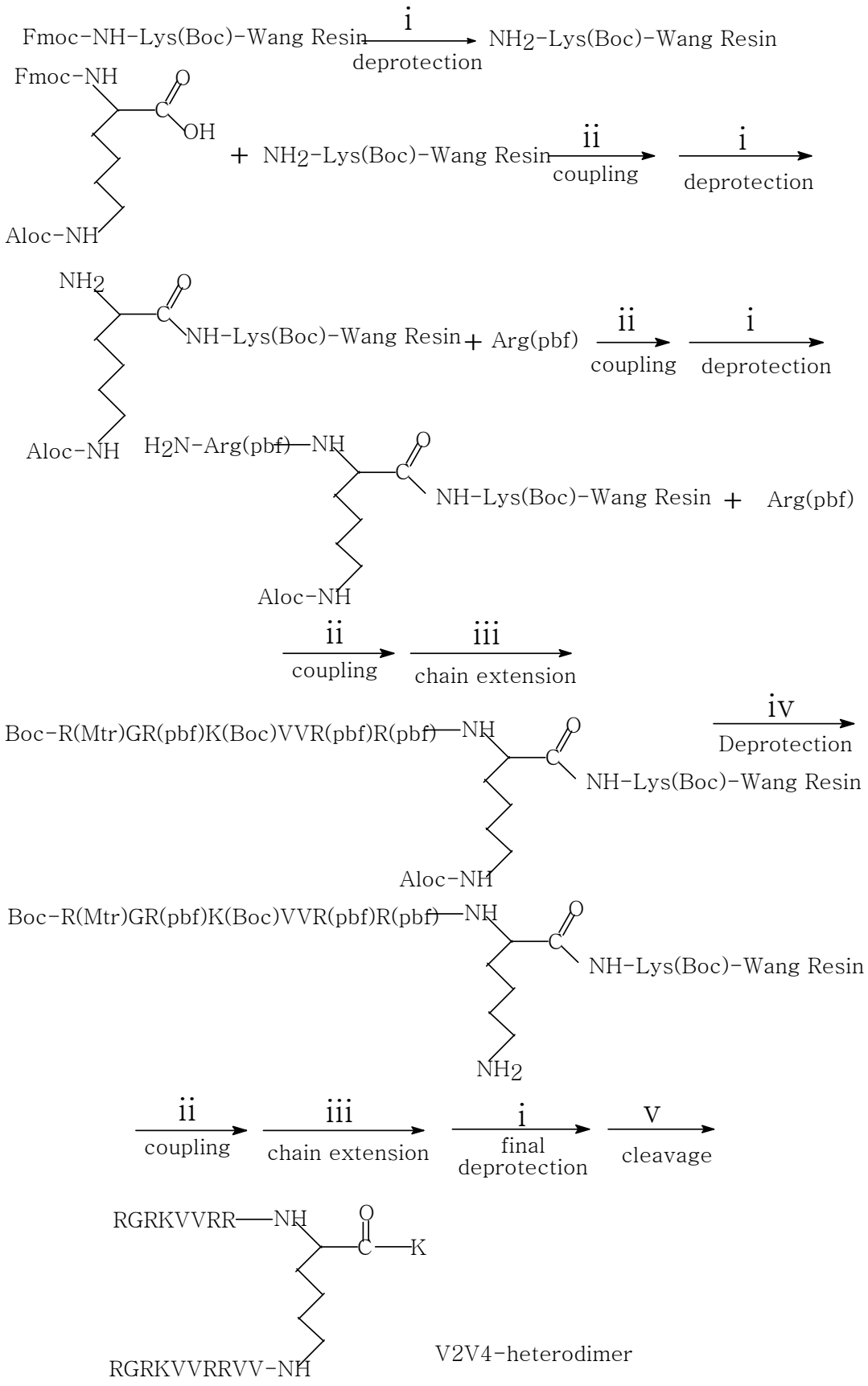
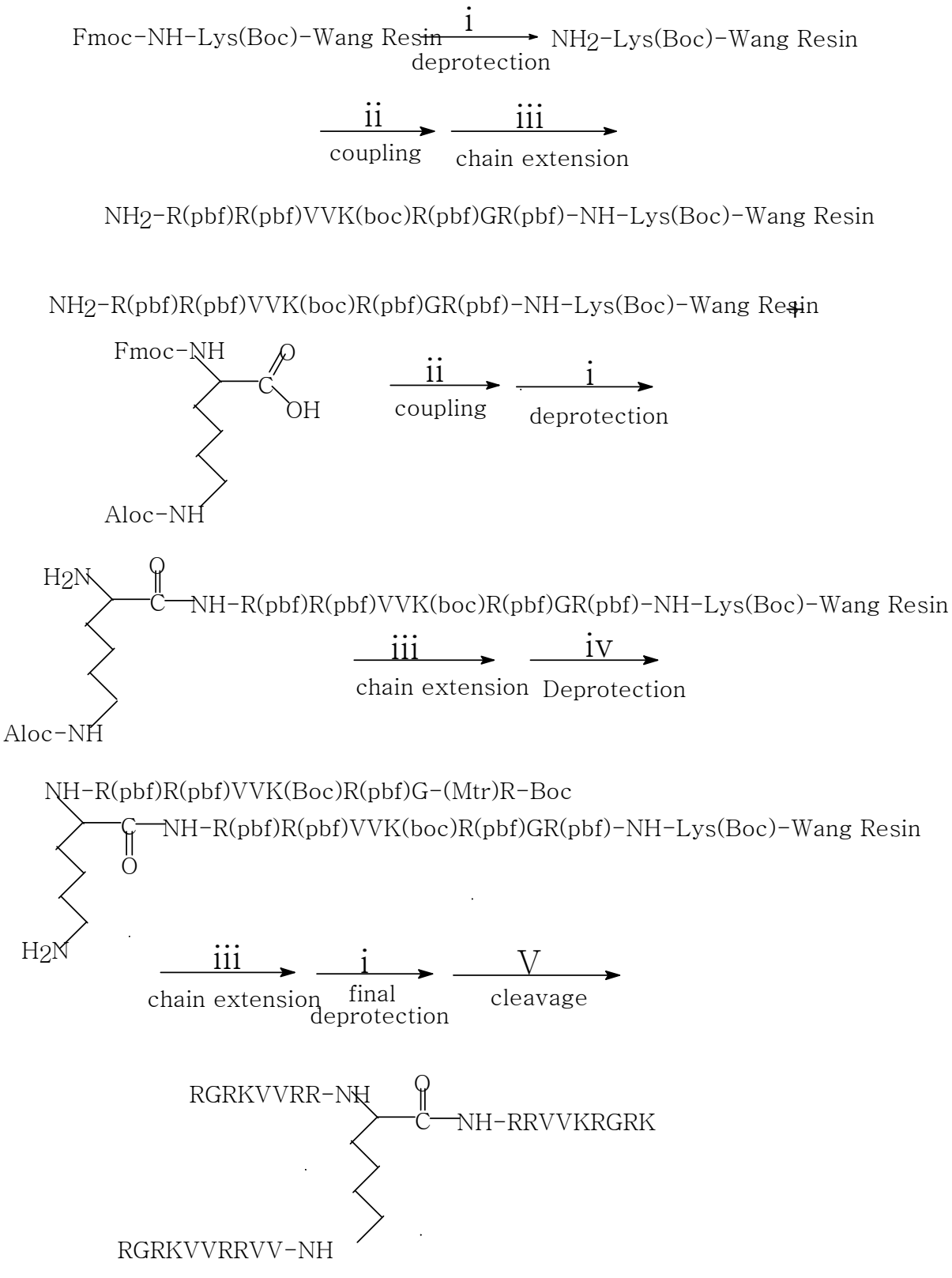
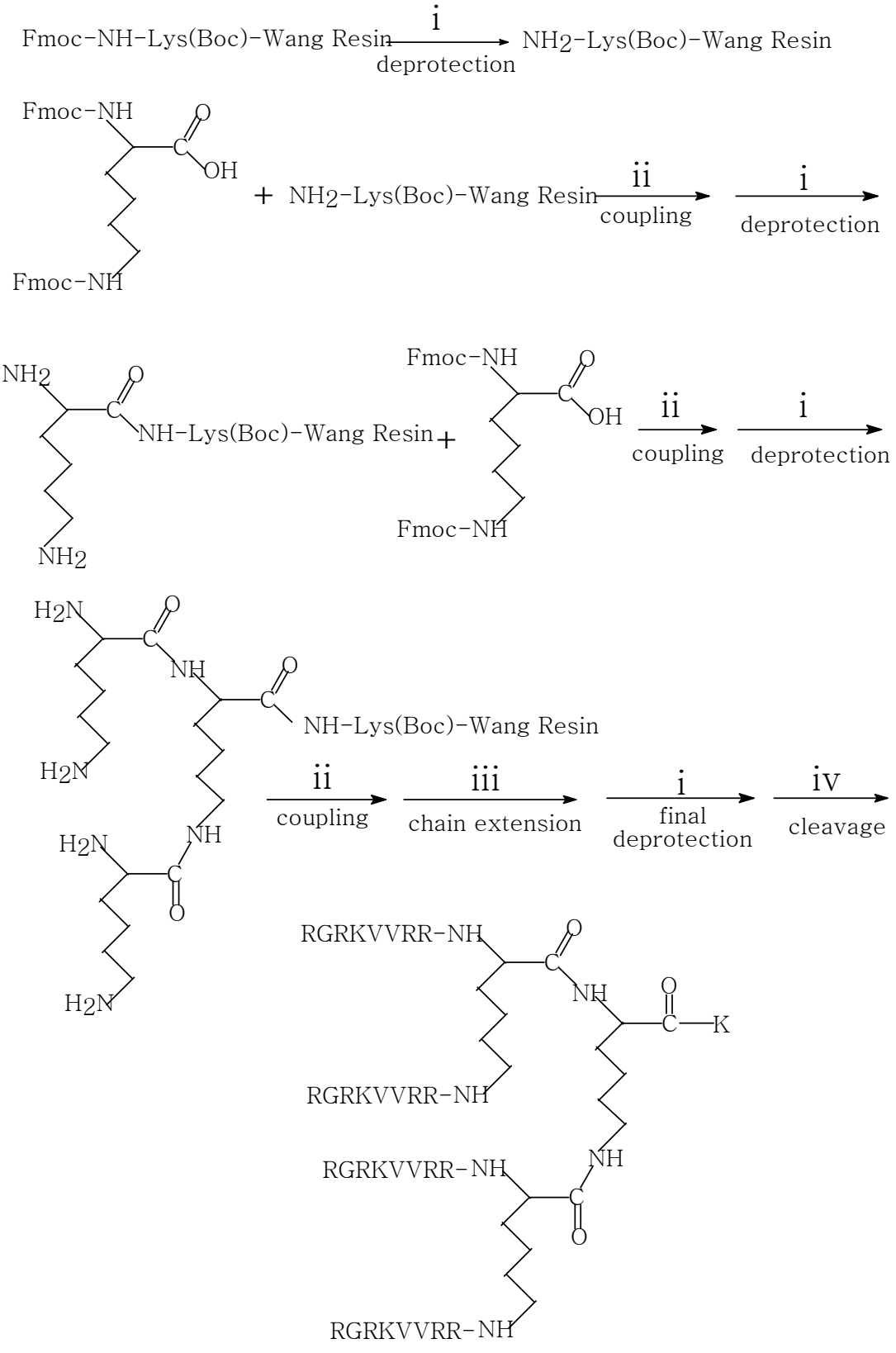

Fmoc-NH-Lys(Boc)-Wang Resin
i
deprotection
NH2-Lys(Boc)-Wang Resin
Fmoc-NH
OH
Aloc-NH
+ NH2-Lys(Boc)-Wang Resin
ii
coupling
i
deprotection
NH2
NH-Lys(Boc)-Wang Resin
+ Arg(pbf)
ii
coupling
i
deprotection
Aloc-NH
H2N-Arg(pbf)-NH
NH-Lys(Boc)-Wang Resin + Arg(pbf)
Aloc-NH
ii
coupling
iii
chain extension
Boc-R(Mtr)GR(pbf)K(Boc)VVR(pbf)R(pbf)-NH
iv
Deprotection
NH-Lys(Boc)-Wang Resin
Aloc-NH
Boc-R(Mtr)GR(pbf)K(Boc)VVR(pbf)R(pbf)-NH
NH-Lys(Boc)-Wang Resin
NH2
ii
coupling
iii
chain extension
i
final deprotection
v
cleavage
RGRKVVRR-NH
K
RGRKVVRRVV-NH
V2V4-heterodimer

Figure 8



heterotrimer

Figure 9



V2-tetramer