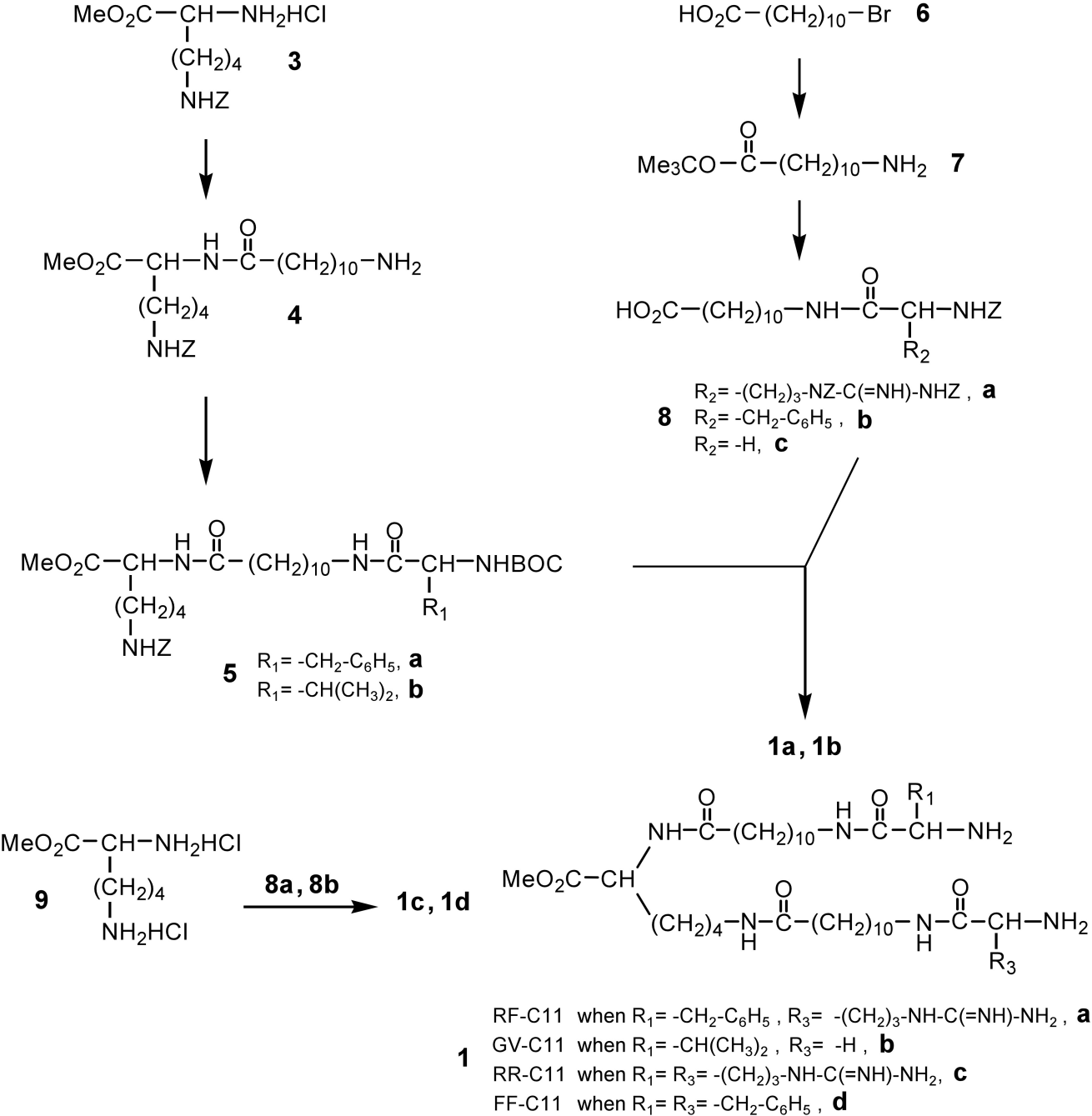
MeO2C–CH–NH2HCl
(CH2)4
NHZ
3
MeO2C–CH–N–C–(CH2)10–NH2
H
O
(CH2)4
NHZ
4
HO2C–(CH2)10–Br
6
Me3CO–C–(CH2)10–NH2
O
7
HO2C–(CH2)10–NH–C–CH–NHZ
O
R2
8
R2= -(CH2)3-NZ-C(=NH)-NHZ , a
R2= -CH2-C6H5 , b
R2= -H, c
MeO2C–CH–N–C–(CH2)10–N–C–CH–NHBOC
H
O
H
O
R1
(CH2)4
NHZ
5
R1= -CH2-C6H5, a
R1= -CH(CH3)2, b
1a, 1b
MeO2C–CH–NH2HCl
(CH2)4
NH2HCl
9
8a, 8b
1c, 1d
NH–C–(CH2)10–N–C–CH–NH2
O
H
O
R1
MeO2C–CH
(CH2)4–N–C–(CH2)10–N–C–CH–NH2
H
O
H
O
R3
1
RF-C11 when R1= -CH2-C6H5 , R3= -(CH2)3-NH-C(=NH)-NH2 , a
GV-C11 when R1= -CH(CH3)2 , R3= -H , b
RR-C11 when R1= R3= -(CH2)3-NH-C(=NH)-NH2, c
FF-C11 when R1= R3= -CH2-C6H5 , d