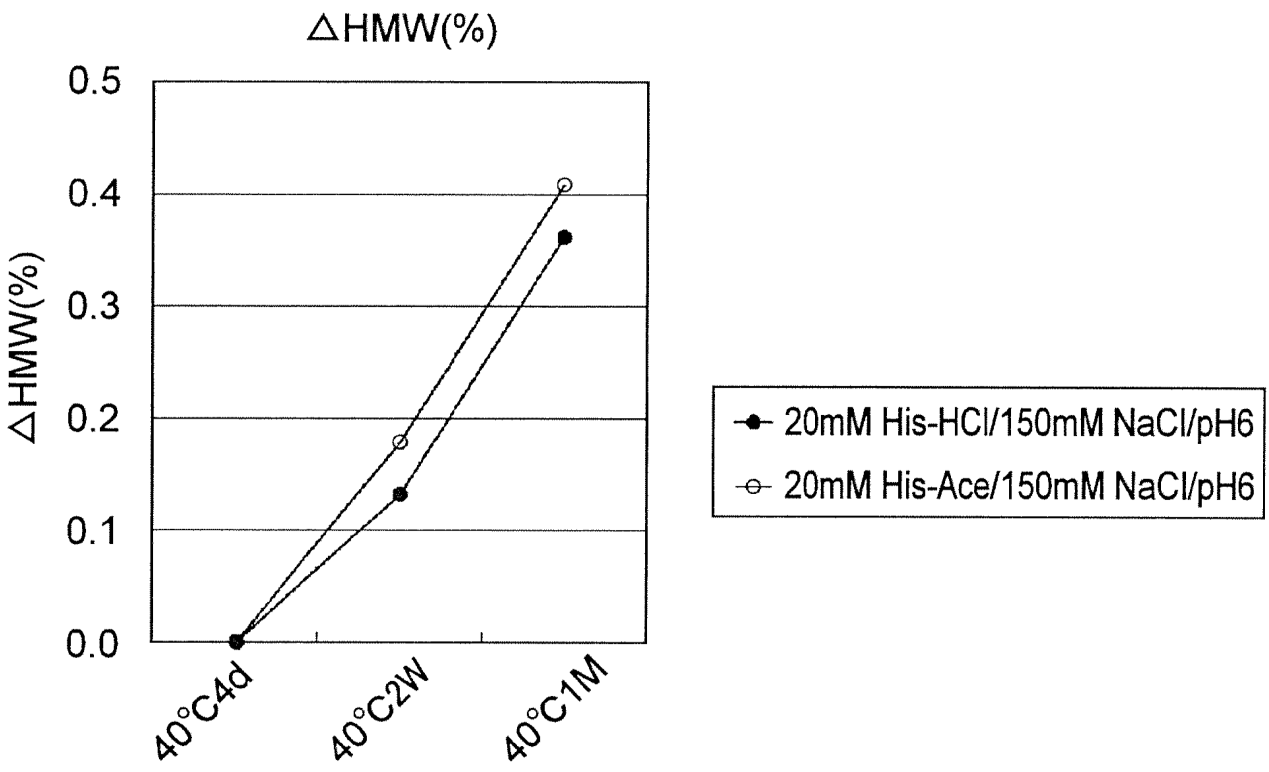

ΔHMW(%)
0.5
0.4
0.3
0.2
0.1
0.0
ΔHMW(%)
40°C4d
40°C2W
40°C1M
20mM His-HCl/150mM NaCl/pH6
20mM His-Ace/150mM NaCl/pH6

FIG. 1

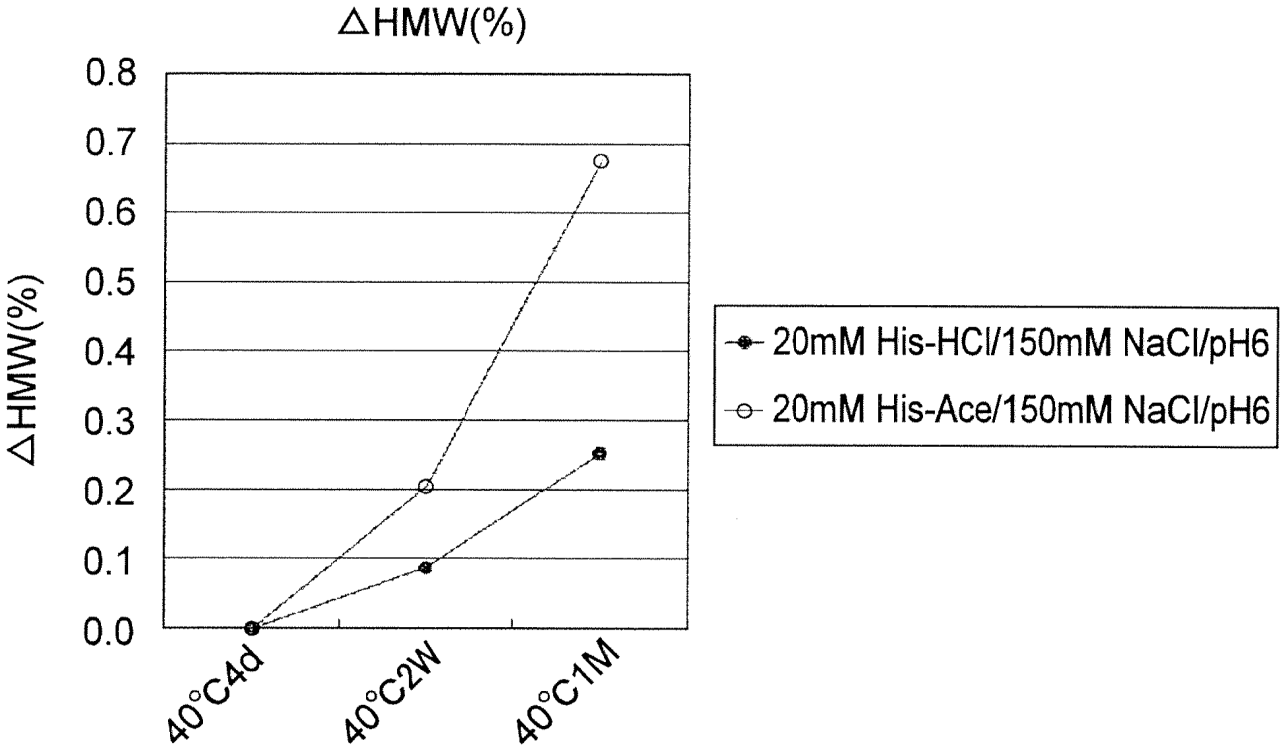

△HMW(%)
△HMW(%)
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
40°C4d
40°C2W
40°C1M
20mM His-HCl/150mM NaCl/pH6
20mM His-Ace/150mM NaCl/pH6

FIG. 2

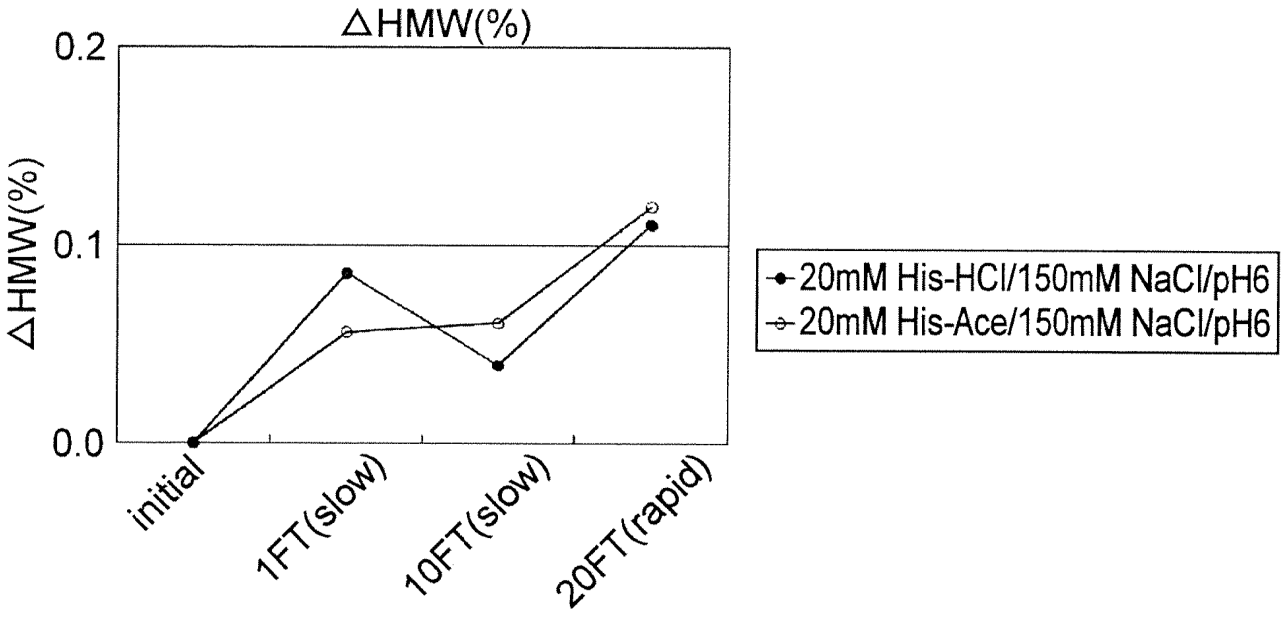

ΔHMW(%)
0.2
0.1
0.0
ΔHMW(%)
initial
1FT(slow)
10FT(slow)
20FT(rapid)
20mM His-HCl/150mM NaCl/pH6
20mM His-Ace/150mM NaCl/pH6

FIG. 3

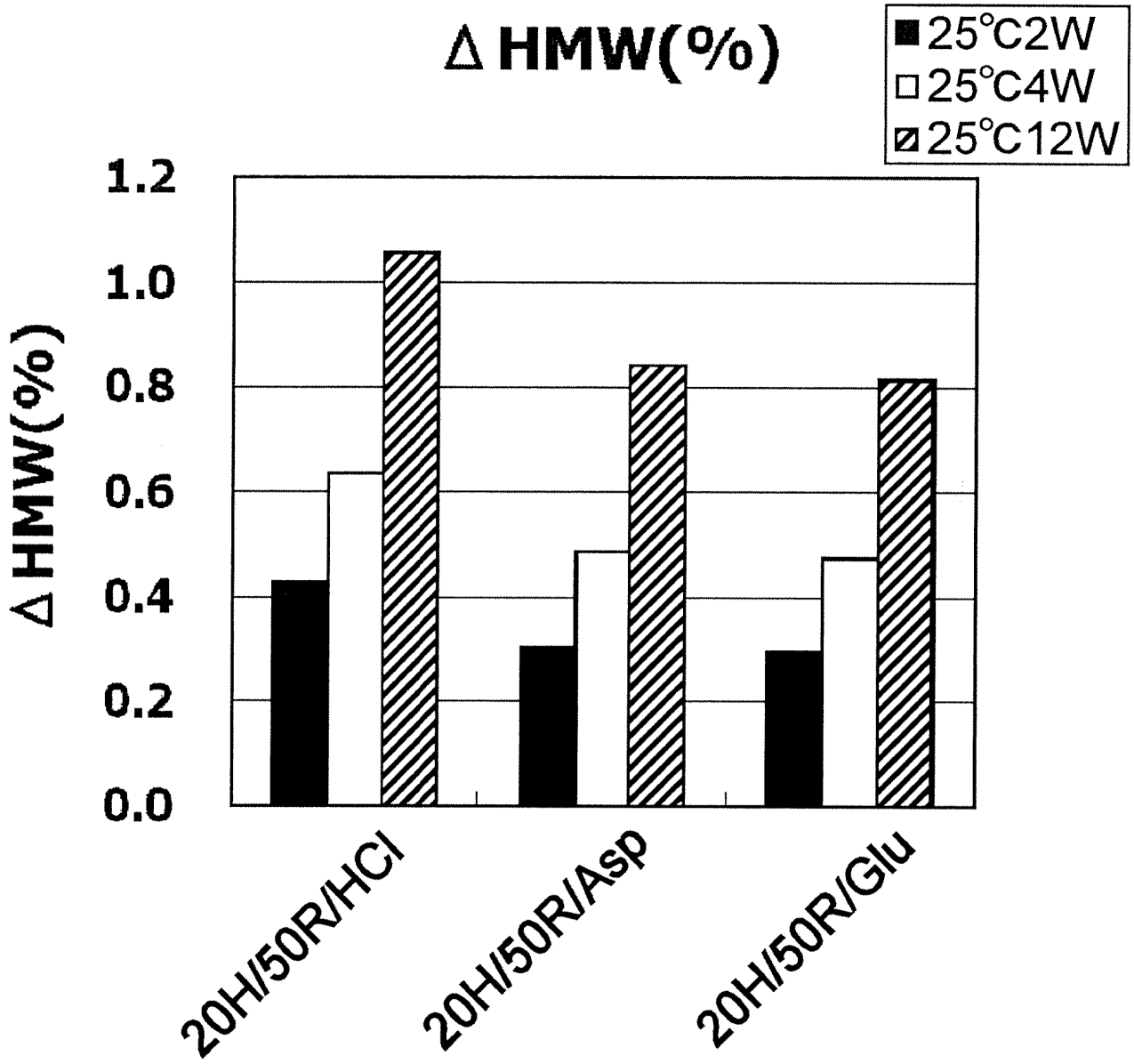

Δ HMW(%)
25°C2W
25°C4W
25°C12W
Δ HMW(%)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
20H/50R/HCl
20H/50R/Asp
20H/50R/Glu

FIG. 4

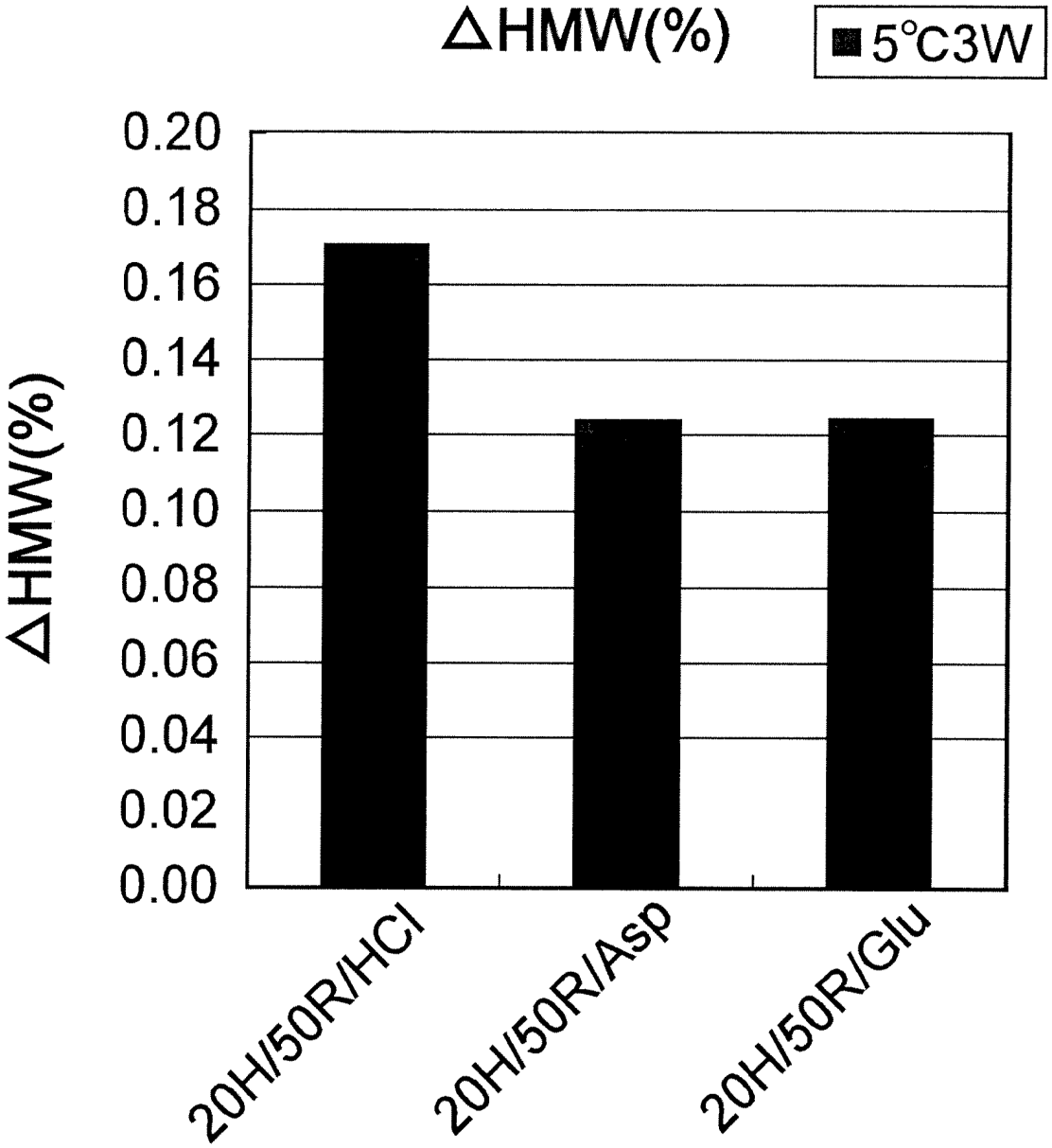

ΔHMW(%)
5°C3W
ΔHMW(%)
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
20H/50R/HCl
20H/50R/Asp
20H/50R/Glu

FIG. 5

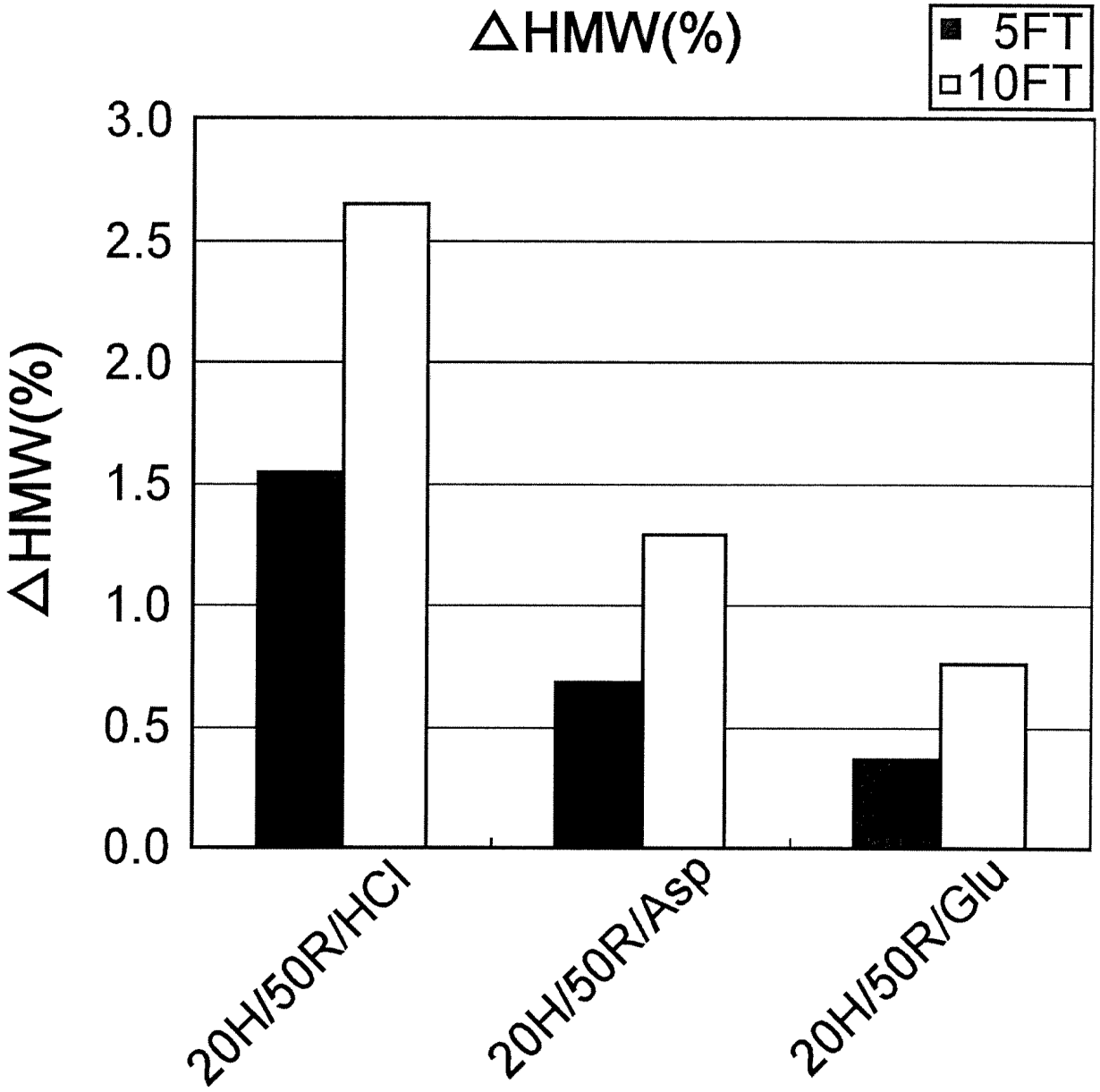

ΔHMW(%)
5FT
10FT
ΔHMW(%)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
20H/50R/HCl
20H/50R/Asp
20H/50R/Glu

FIG. 6

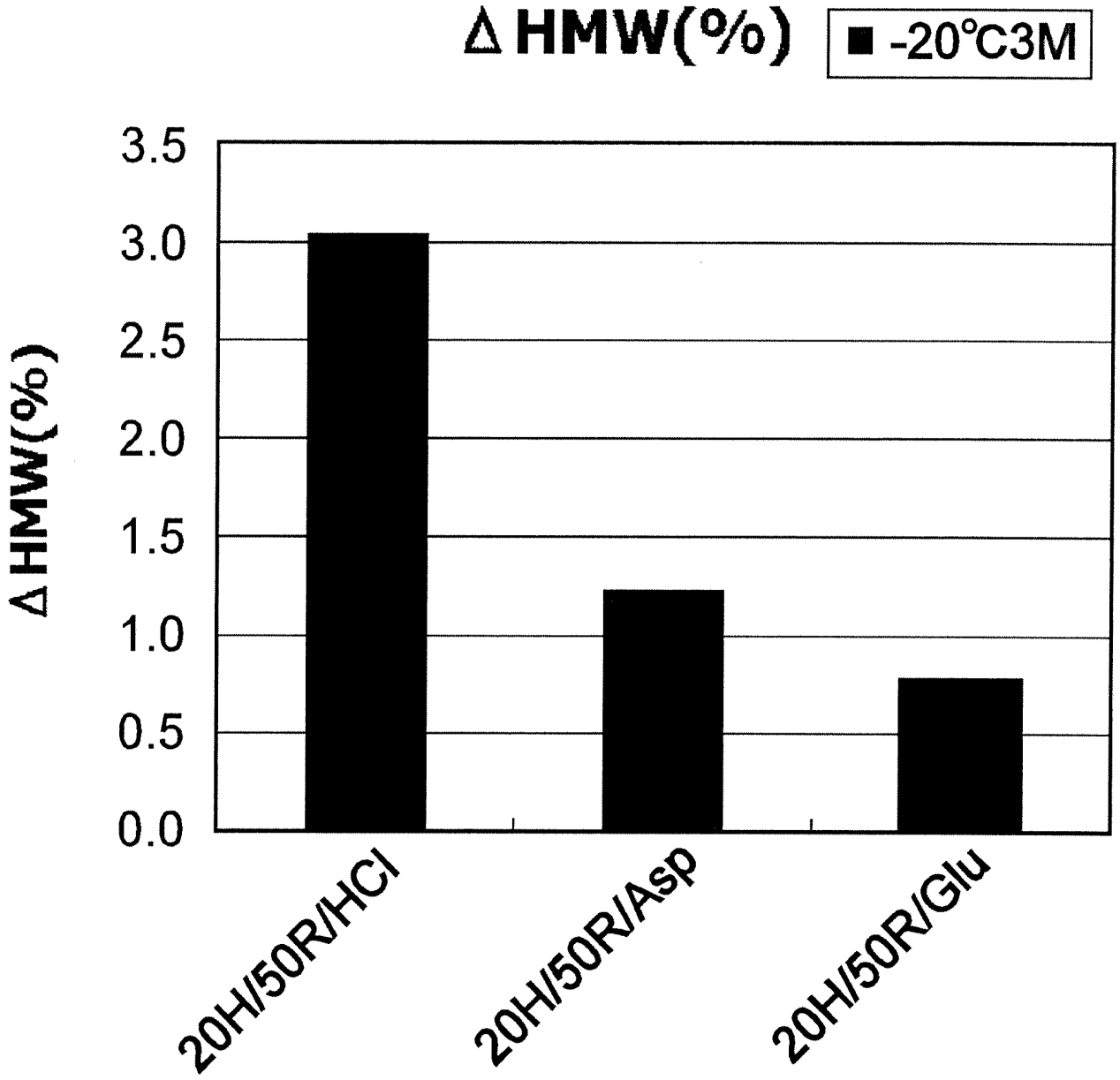

Δ HMW(%)
■ -20°C3M
Δ HMW(%)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
20H/50R/HCl
20H/50R/Asp
20H/50R/Glu

FIG. 7

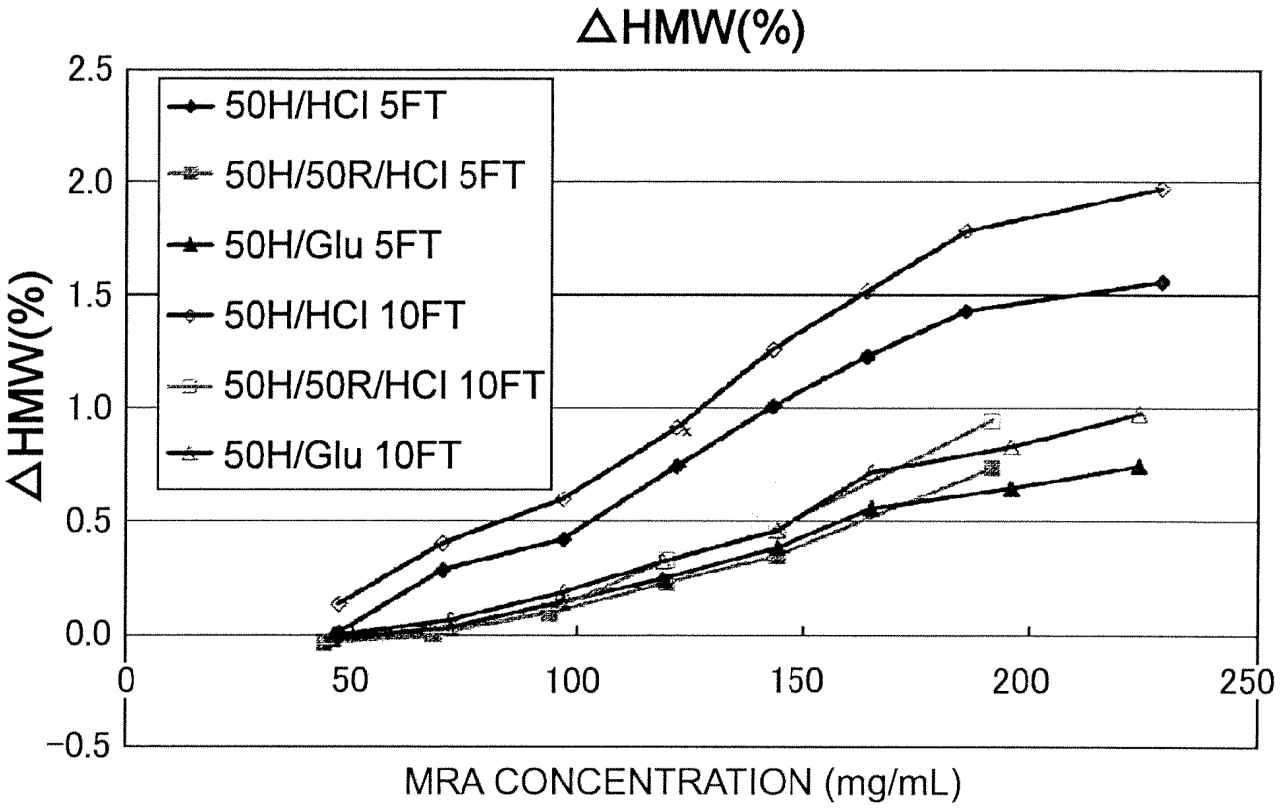

ΔHMW(%)
2.5
2.0
1.5
1.0
0.5
0.0
−0.5
0
50
100
150
200
250
ΔHMW(%)
MRA CONCENTRATION (mg/mL)
50H/HCl 5FT
50H/50R/HCl 5FT
50H/Glu 5FT
50H/HCl 10FT
50H/50R/HCl 10FT
50H/Glu 10FT

FIG. 8

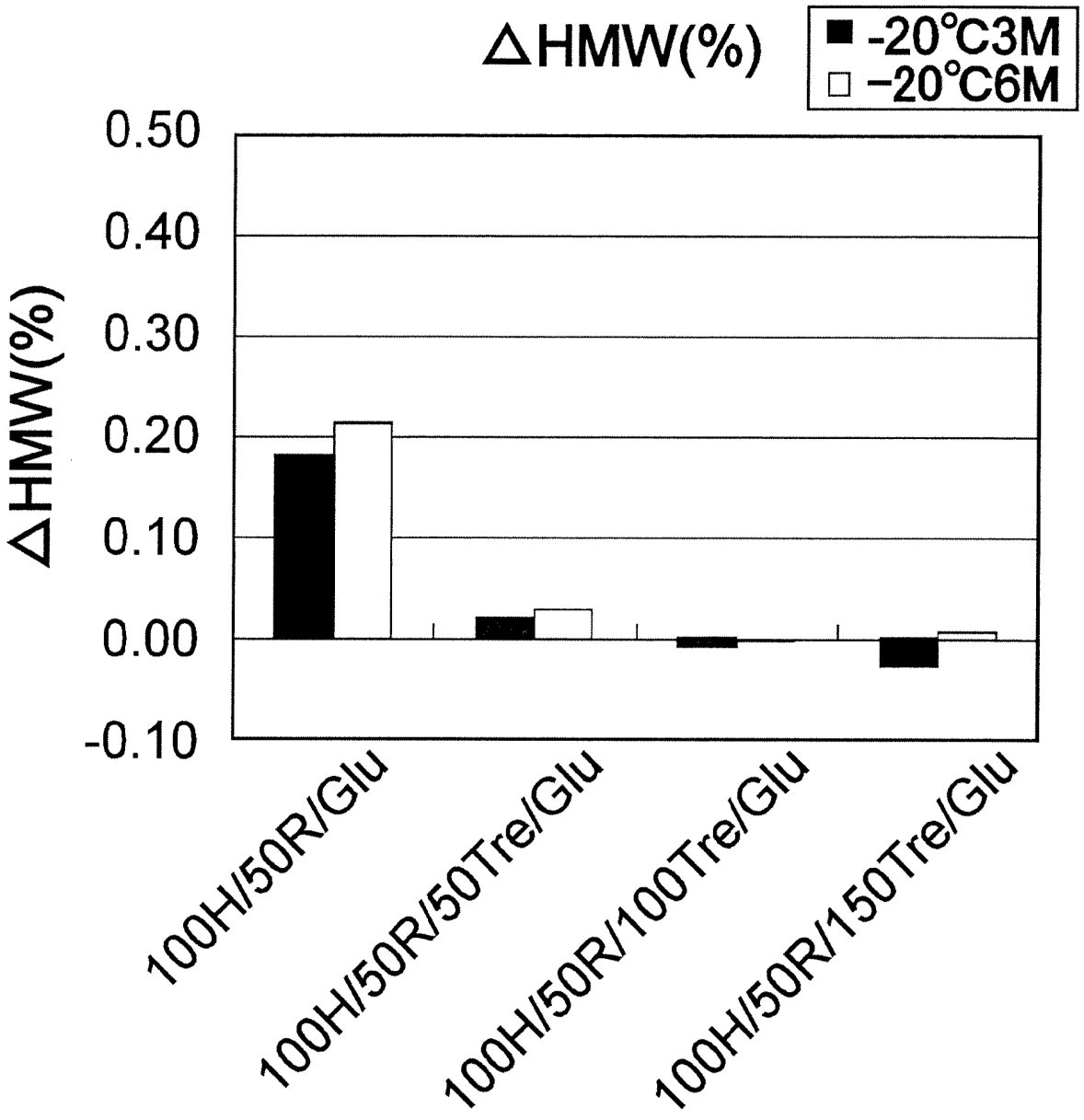

ΔHMW(%)
-20°C3M
-20°C6M
ΔHMW(%)
0.50
0.40
0.30
0.20
0.10
0.00
-0.10
100H/50R/Glu
100H/50R/50Tre/Glu
100H/50R/100Tre/Glu
100H/50R/150Tre/Glu

FIG. 9

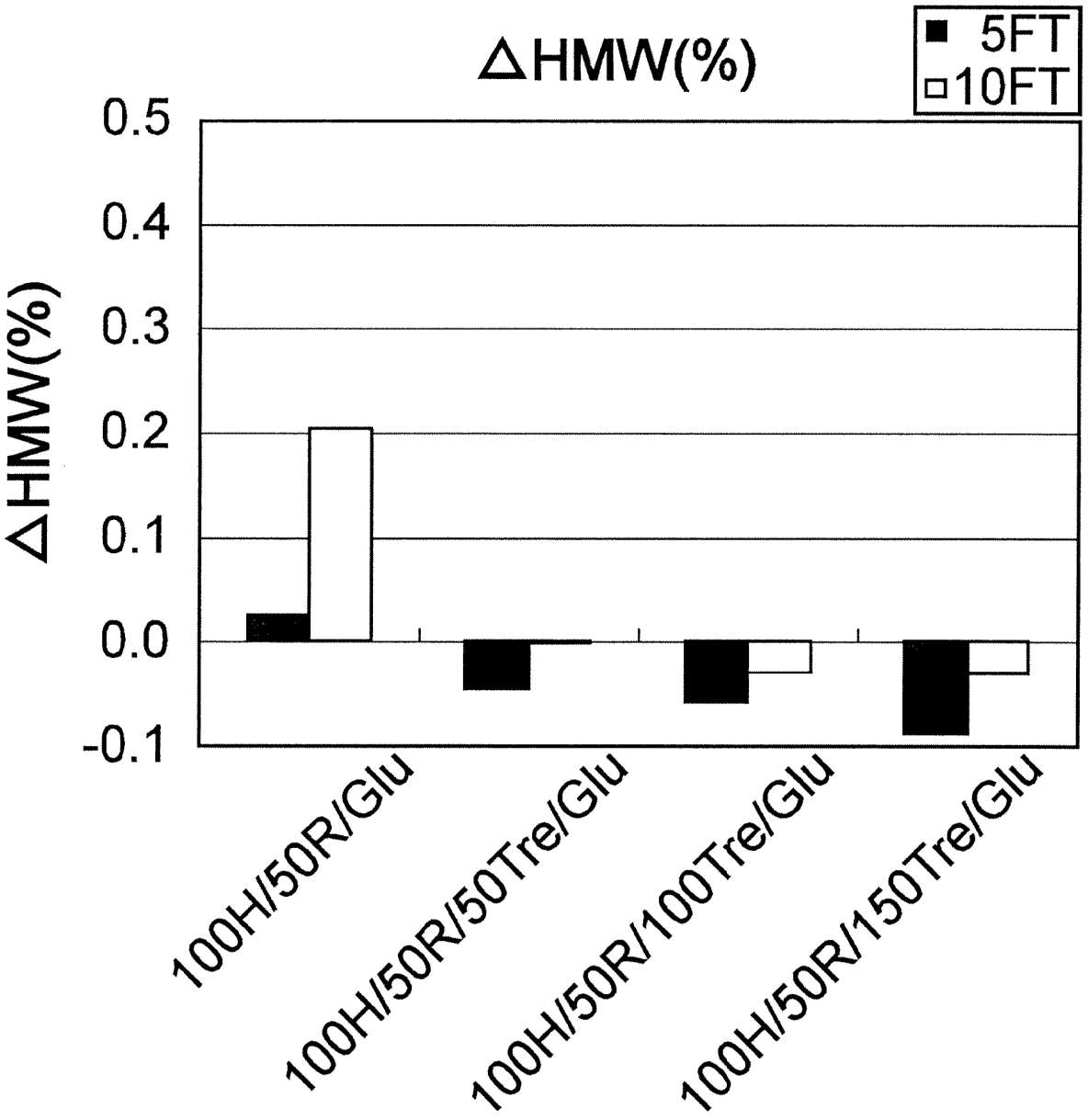

ΔHMW(%)
5FT
10FT
ΔHMW(%)
0.5
0.4
0.3
0.2
0.1
0.0
-0.1
100H/50R/Glu
100H/50R/50Tre/Glu
100H/50R/100Tre/Glu
100H/50R/150Tre/Glu

FIG. 10

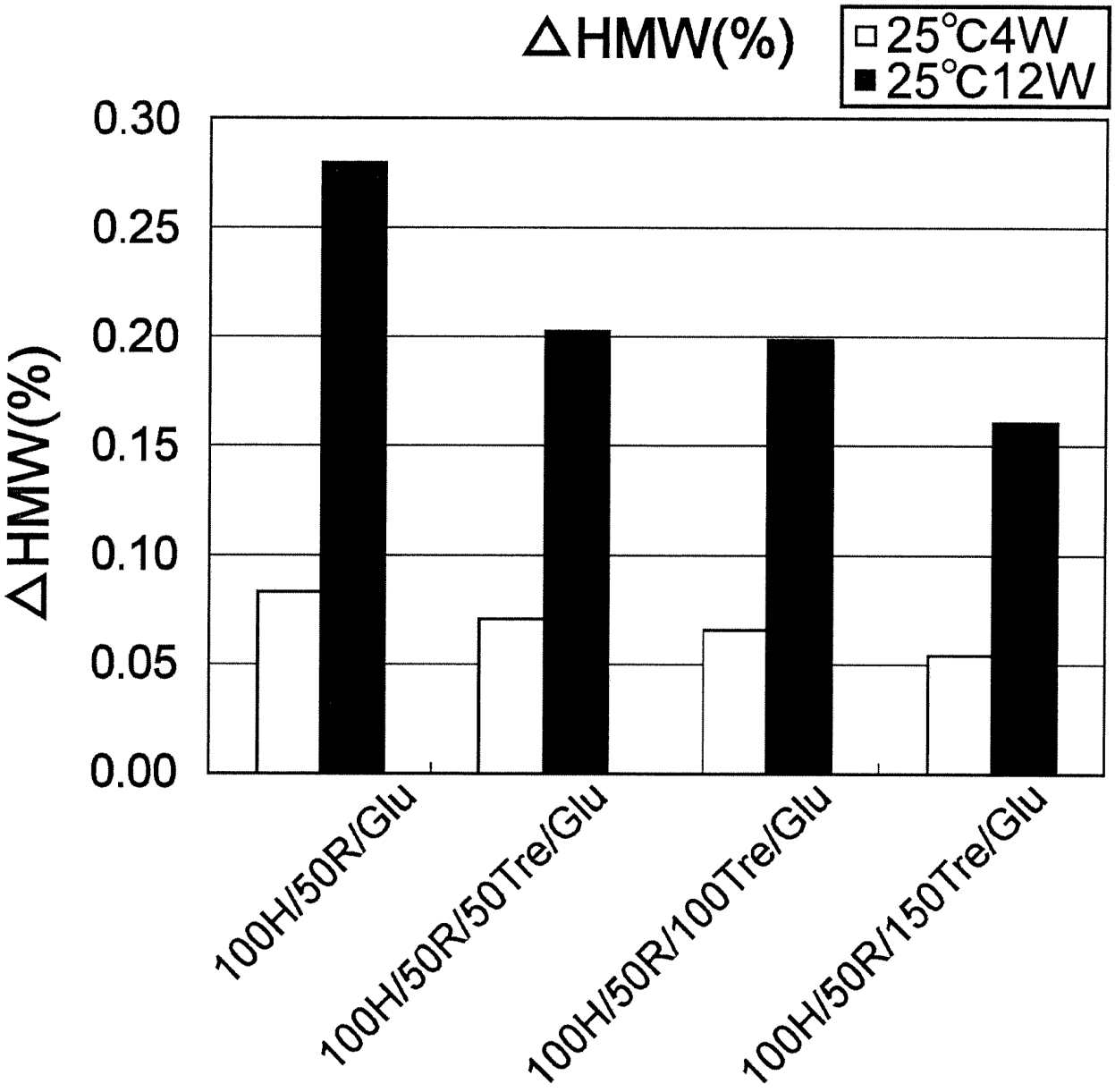

ΔHMW(%)
□25°C4W
■25°C12W
ΔHMW(%)
0.30
0.25
0.20
0.15
0.10
0.05
0.00
100H/50R/Glu
100H/50R/50Tre/Glu
100H/50R/100Tre/Glu
100H/50R/150Tre/Glu

FIG. 11

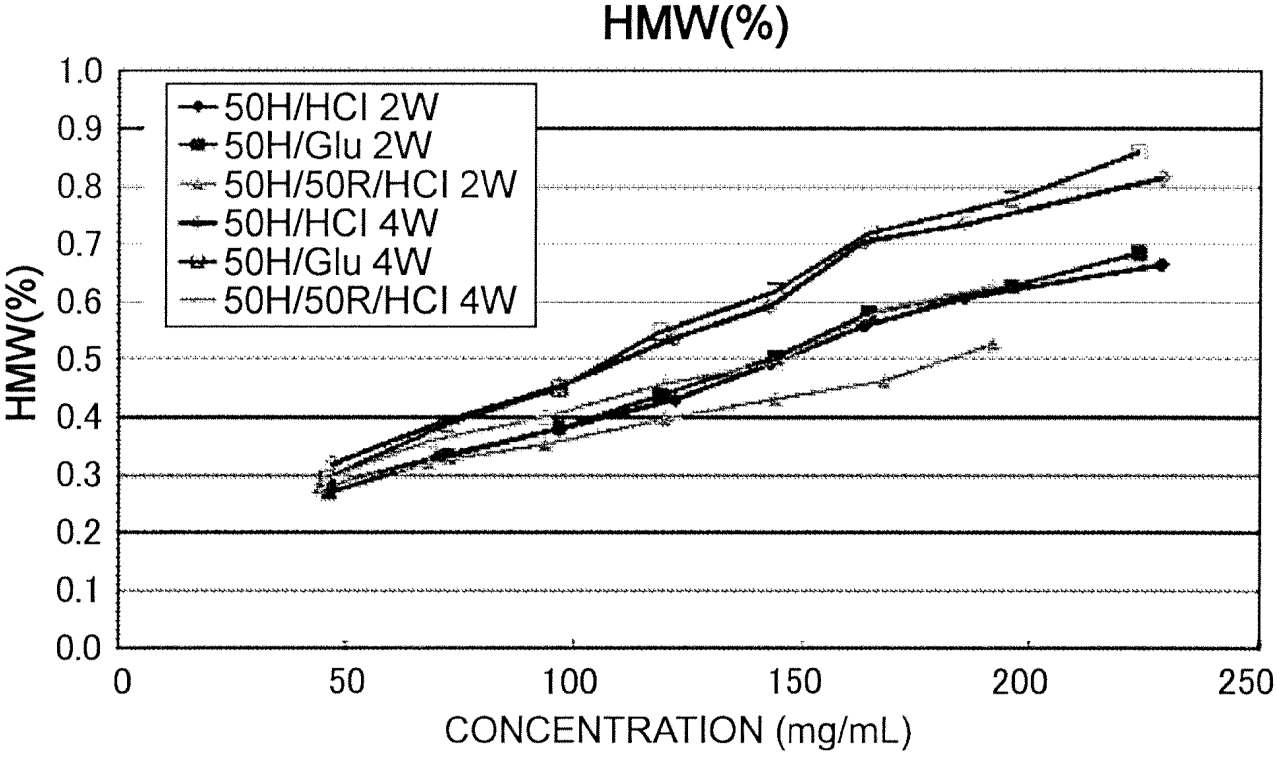

HMW(%)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
HMW(%)
50H/HCl 2W
50H/Glu 2W
50H/50R/HCl 2W
50H/HCl 4W
50H/Glu 4W
50H/50R/HCl 4W
0
50
100
150
200
250
CONCENTRATION (mg/mL)

FIG. 12

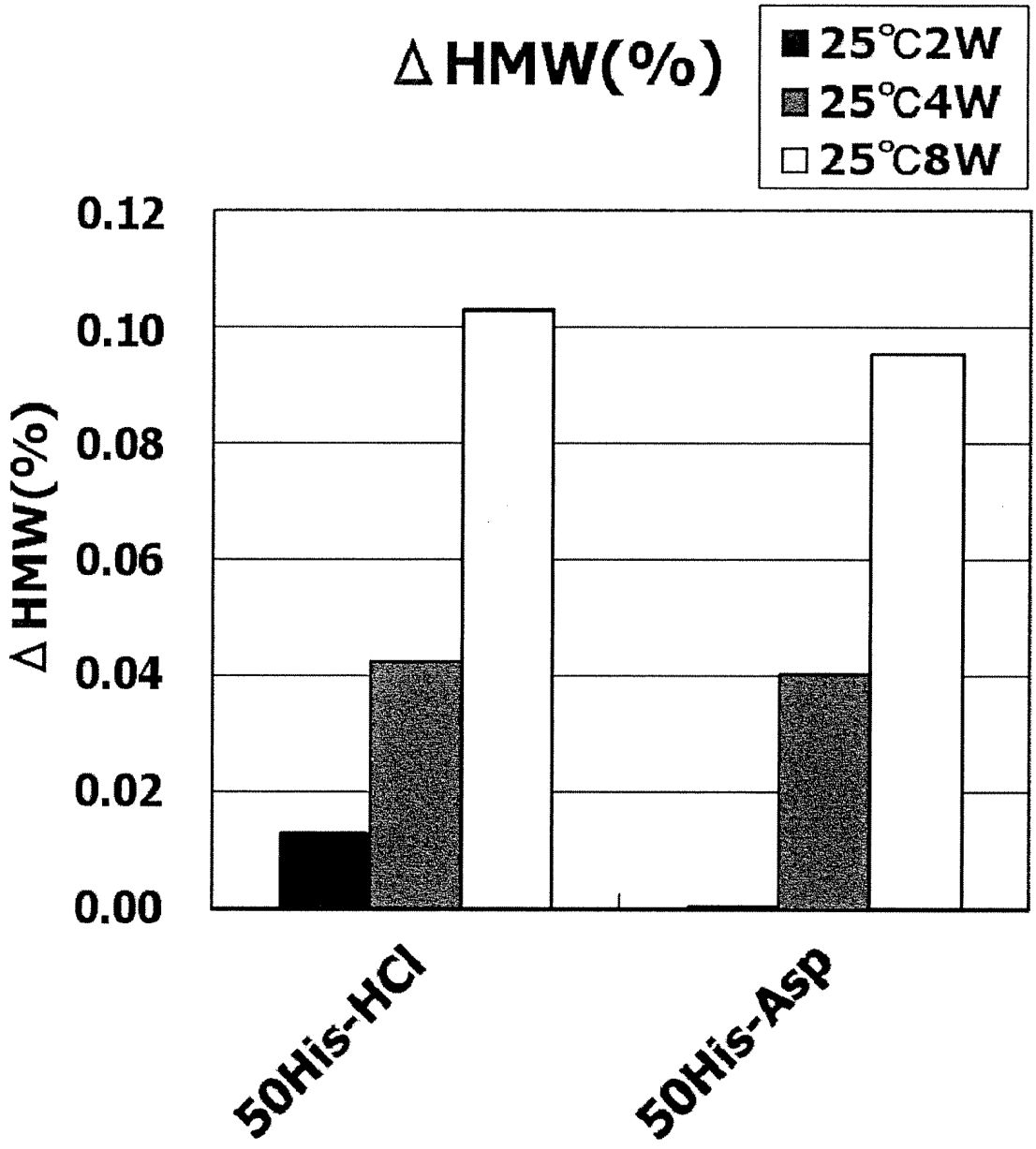

ΔHMW(%)
25℃2W
25℃4W
25℃8W
0.12
0.10
0.08
0.06
0.04
0.02
0.00
ΔHMW(%)
50His-HCl
50His-Asp

FIG. 13

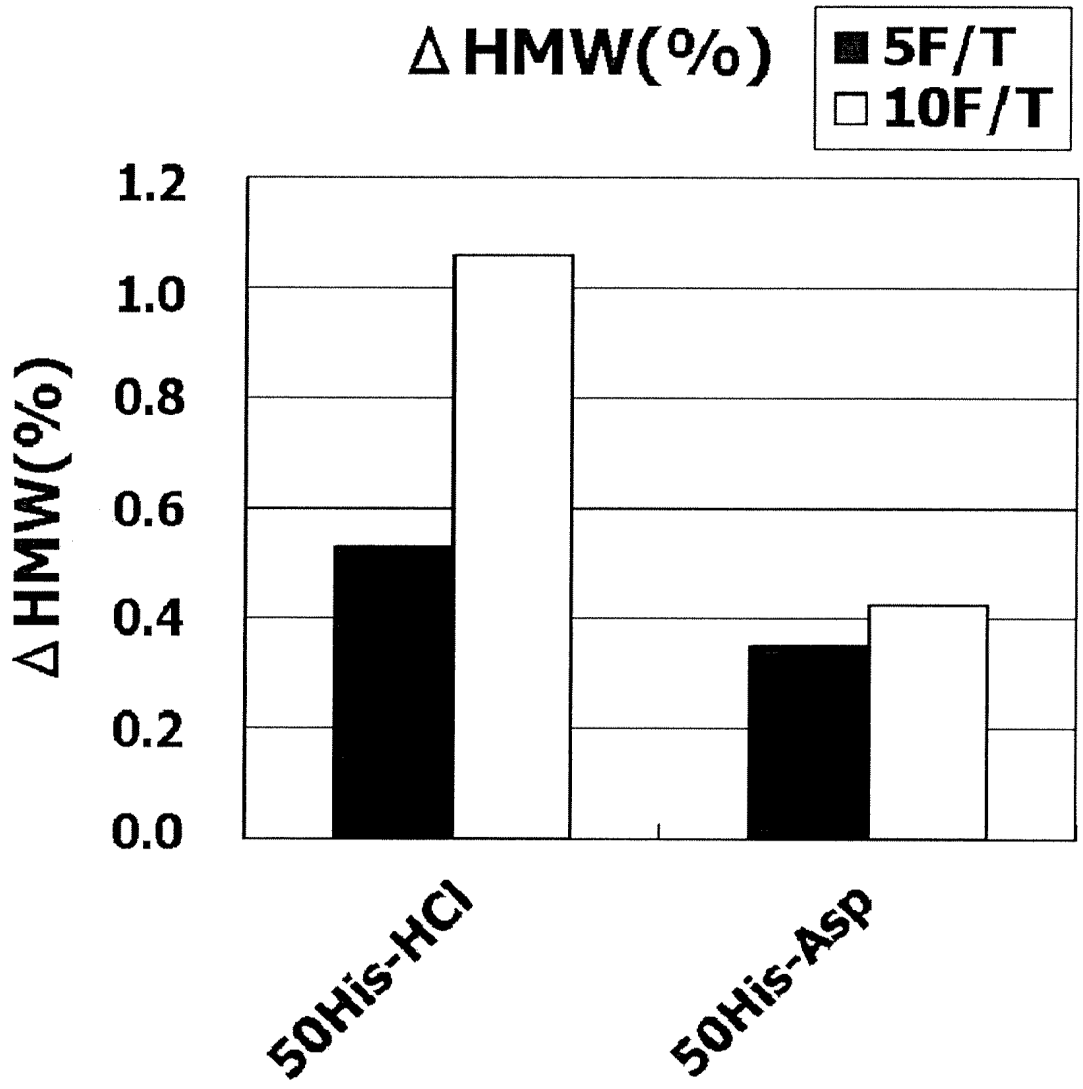


FIG. 14

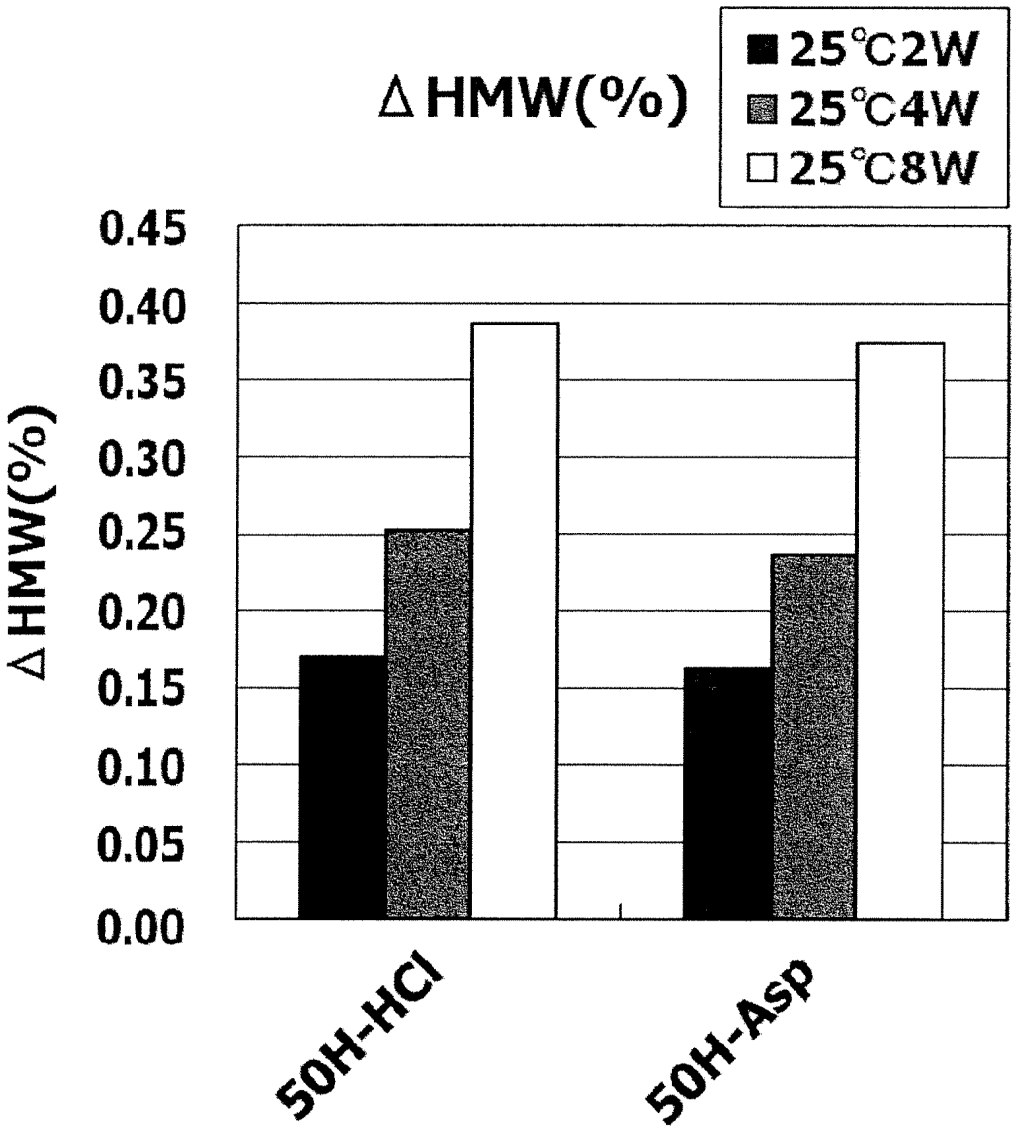

ΔHMW(%)
25℃2W
25℃4W
25℃8W
ΔHMW(%)
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
50H-HCl
50H-Asp

FIG. 15

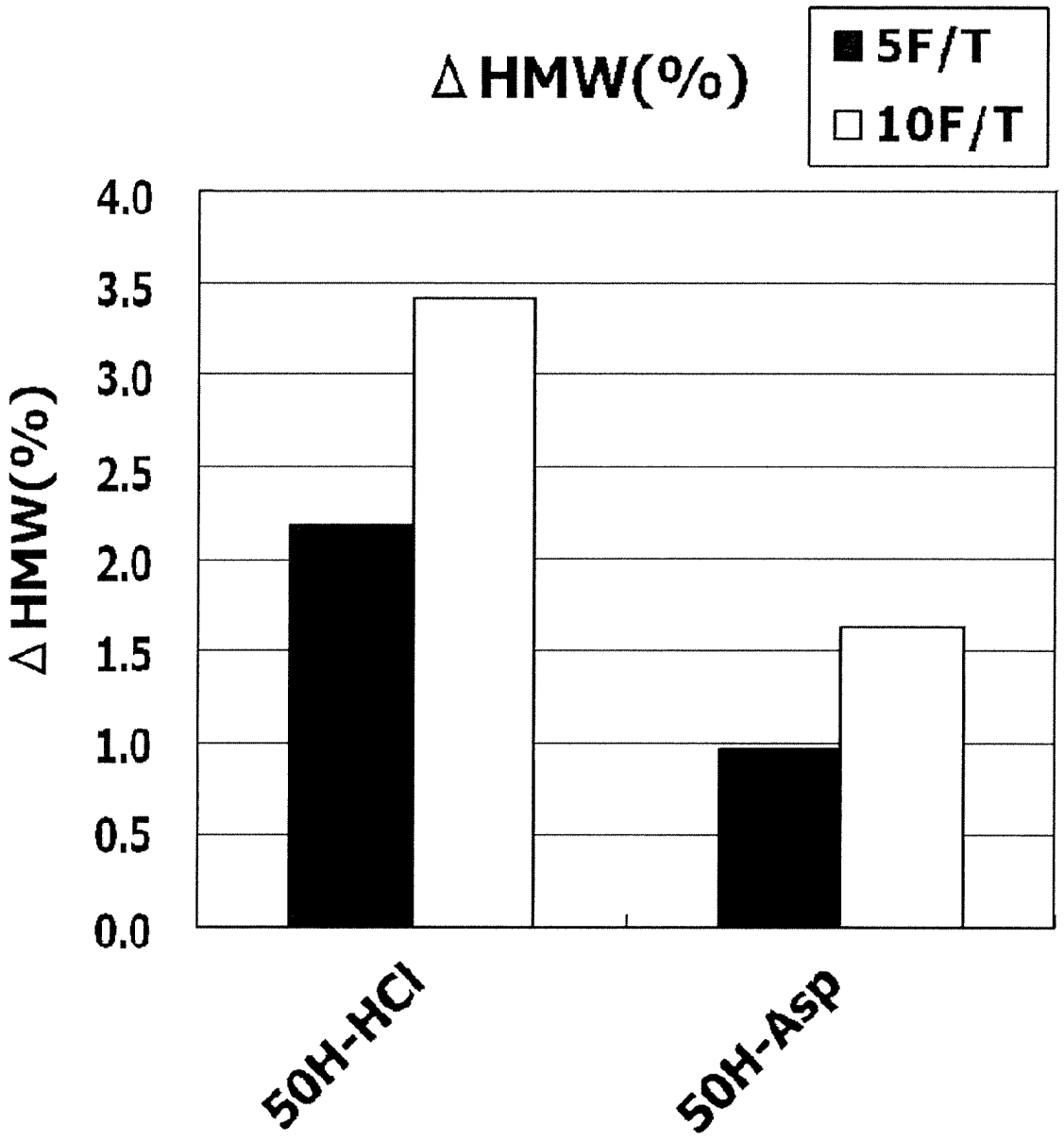


FIG. 16

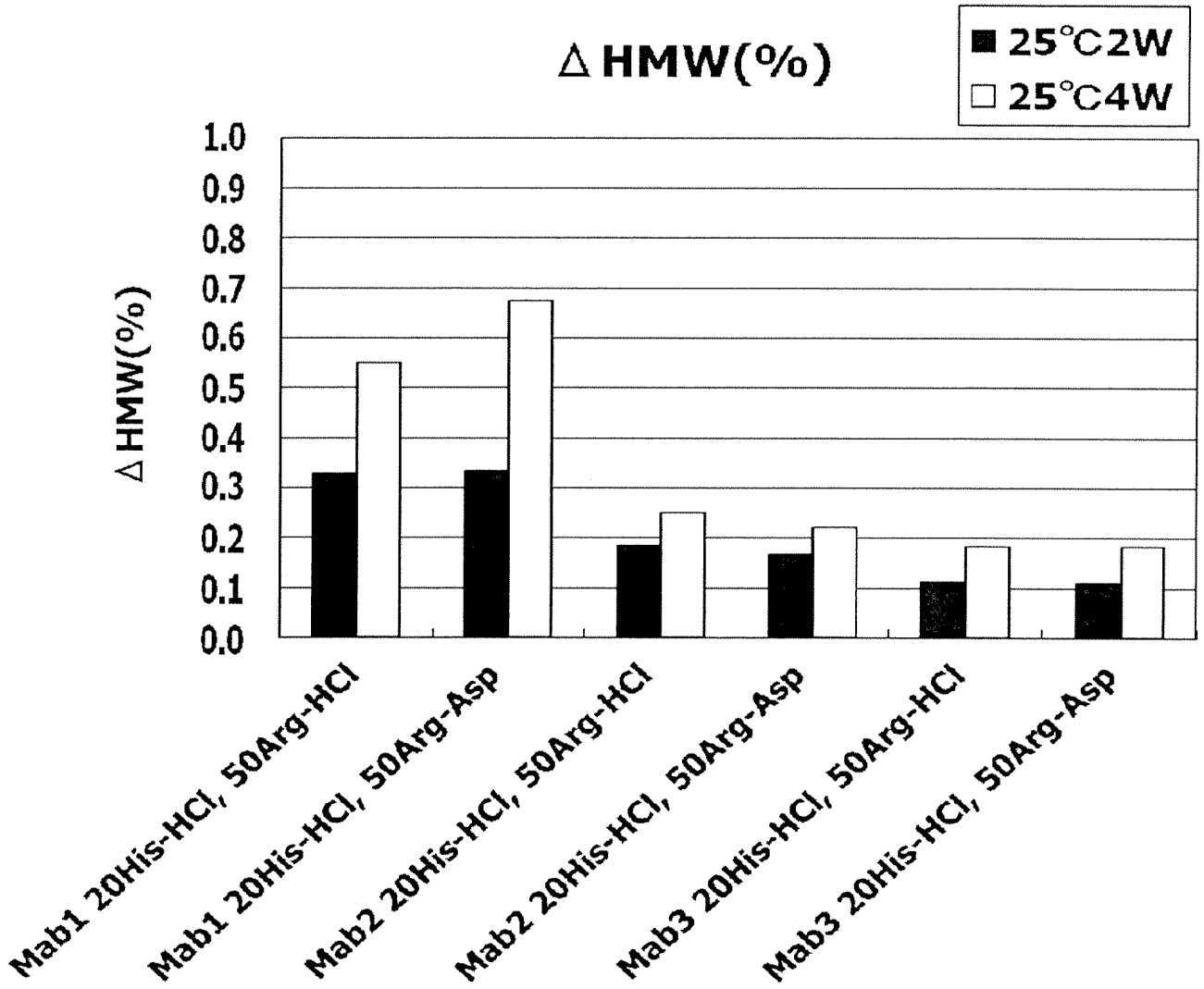

Δ HMW(%)
25℃2W
25℃4W
Δ HMW(%)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
Mab1 20His-HCl, 50Arg-HCl
Mab1 20His-HCl, 50Arg-Asp
Mab2 20His-HCl, 50Arg-HCl
Mab2 20His-HCl, 50Arg-Asp
Mab3 20His-HCl, 50Arg-HCl
Mab3 20His-HCl, 50Arg-Asp

FIG. 17

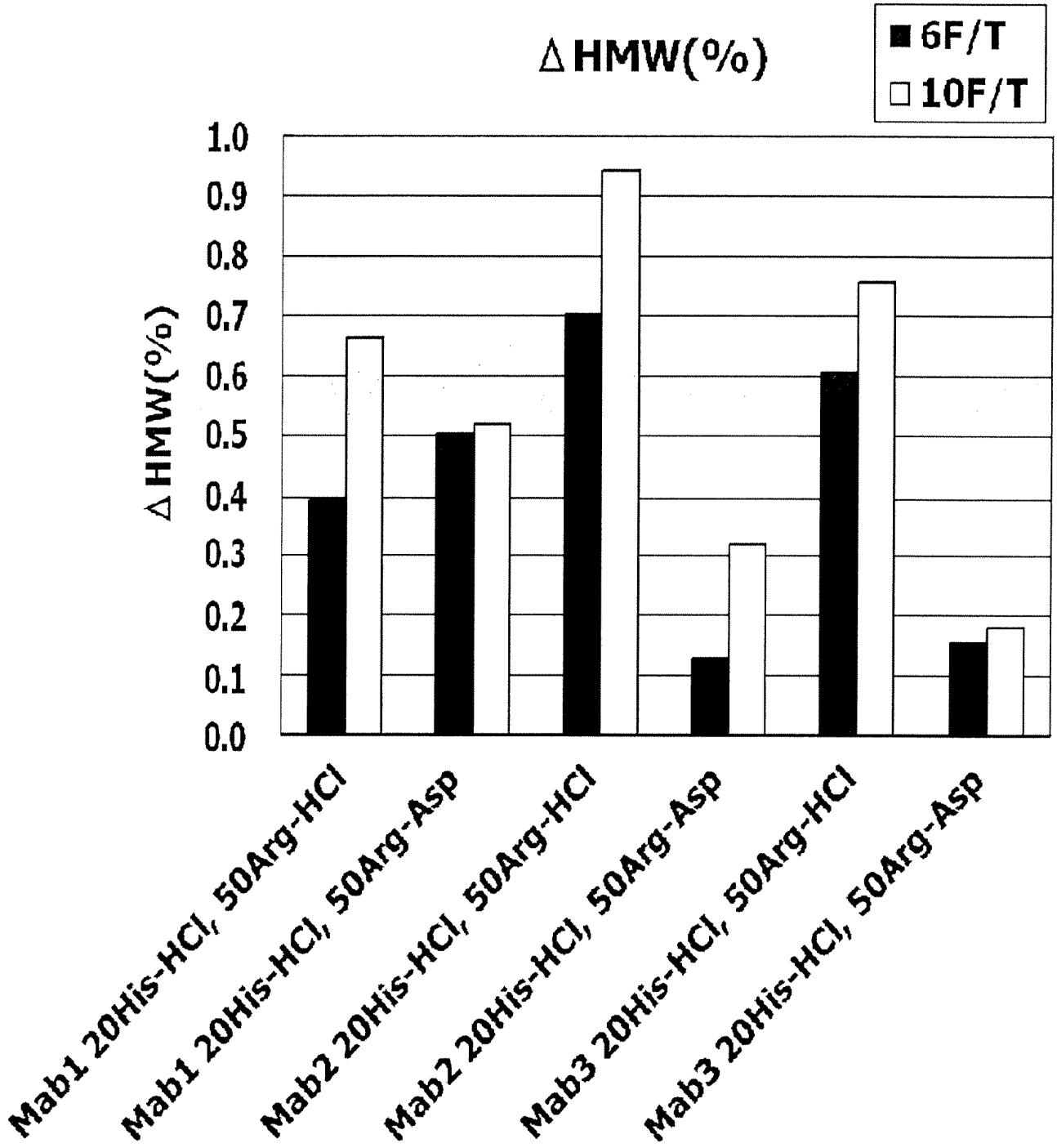

ΔHMW(%)
6F/T
10F/T
ΔHMW(%)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
Mab1 20His-HCl, 50Arg-HCl
Mab1 20His-HCl, 50Arg-Asp
Mab2 20His-HCl, 50Arg-HCl
Mab2 20His-HCl, 50Arg-Asp
Mab3 20His-HCl, 50Arg-HCl
Mab3 20His-HCl, 50Arg-Asp

FIG. 18

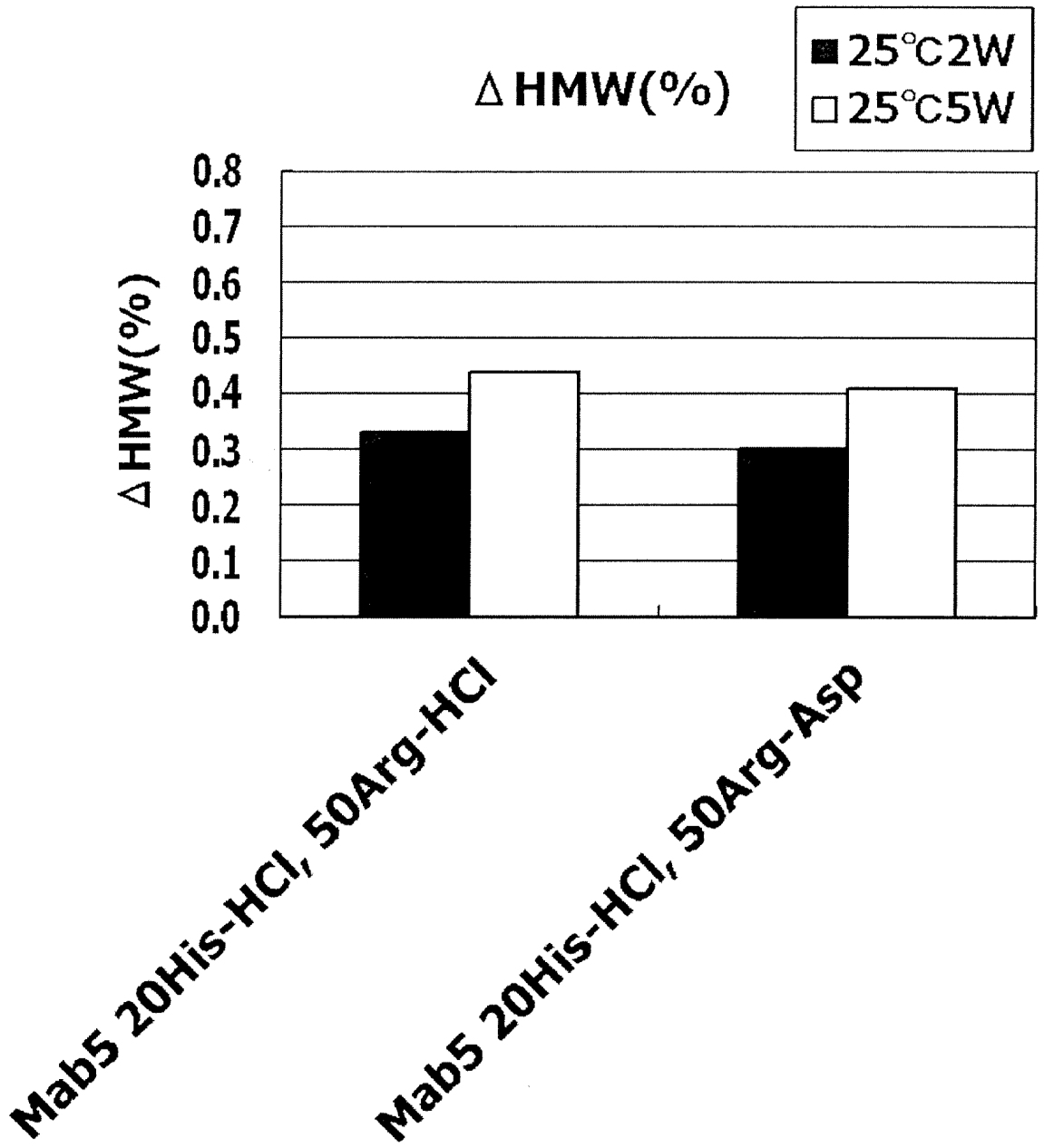

Δ HMW(%)
25°C2W
25°C5W
Δ HMW(%)
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
Mab5 20His-HCl, 50Arg-HCl
Mab5 20His-HCl, 50Arg-Asp

FIG. 19

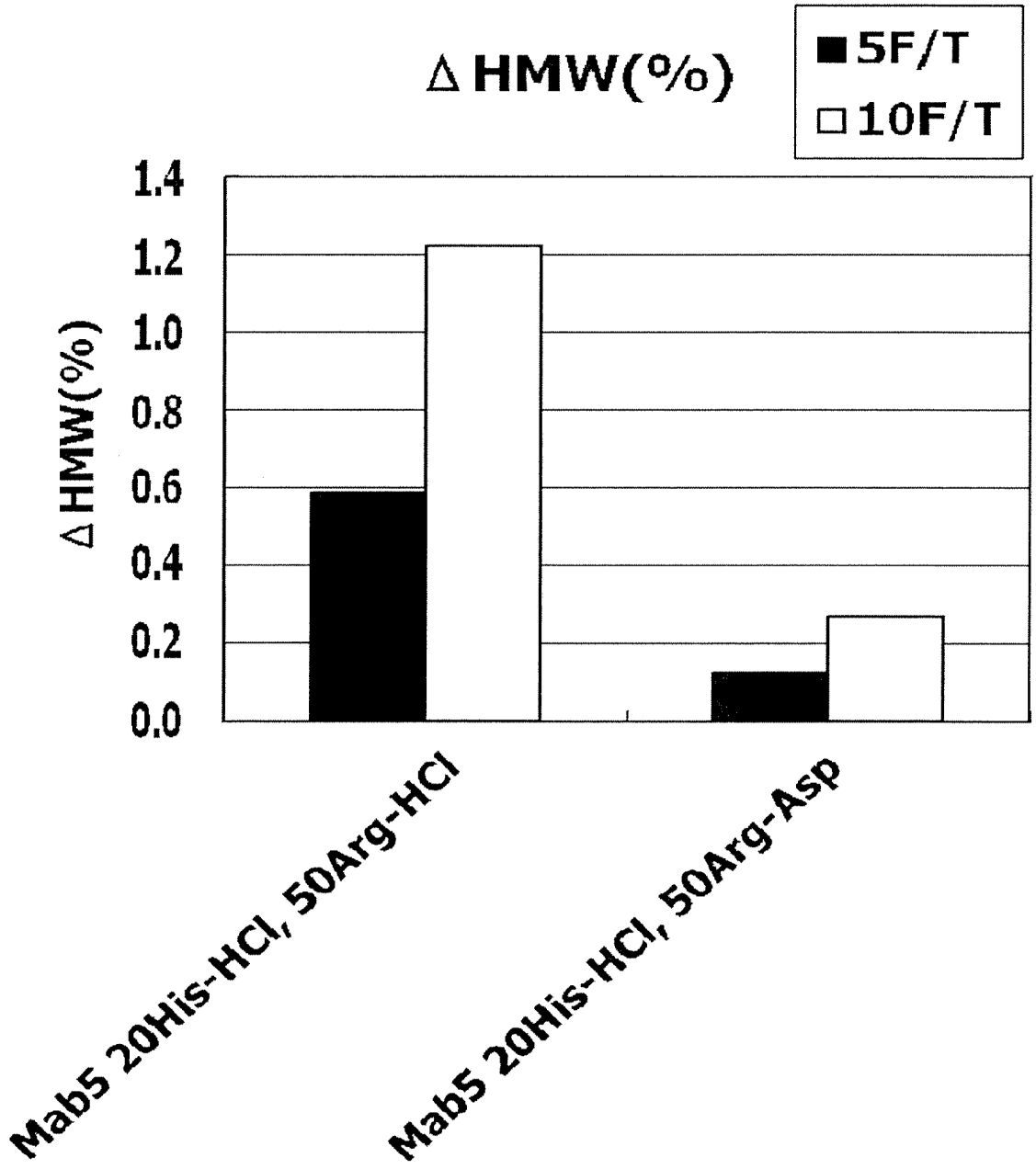

Δ HMW(%)
5F/T
10F/T
Δ HMW(%)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
MabS 20His-HCl, 50Arg-HCl
MabS 20His-HCl, 50Arg-Asp

FIG. 20

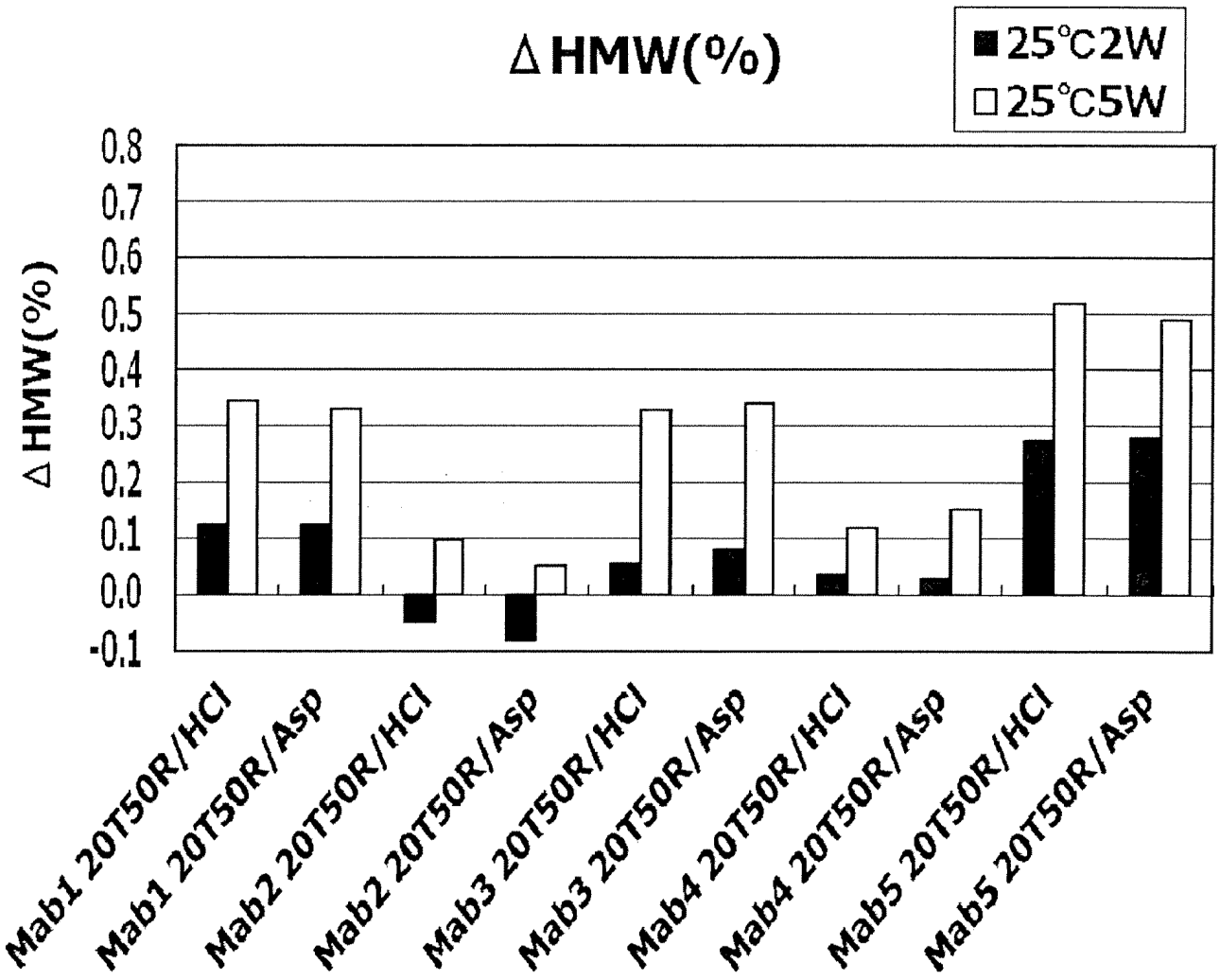

ΔHMW(%)
25°C2W
25°C5W
ΔHMW(%)
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
-0.1
Mab1 20T50R/HCl
Mab1 20T50R/Asp
Mab2 20T50R/HCl
Mab2 20T50R/Asp
Mab3 20T50R/HCl
Mab3 20T50R/Asp
Mab4 20T50R/HCl
Mab4 20T50R/Asp
Mab5 20T50R/HCl
Mab5 20T50R/Asp

FIG. 21

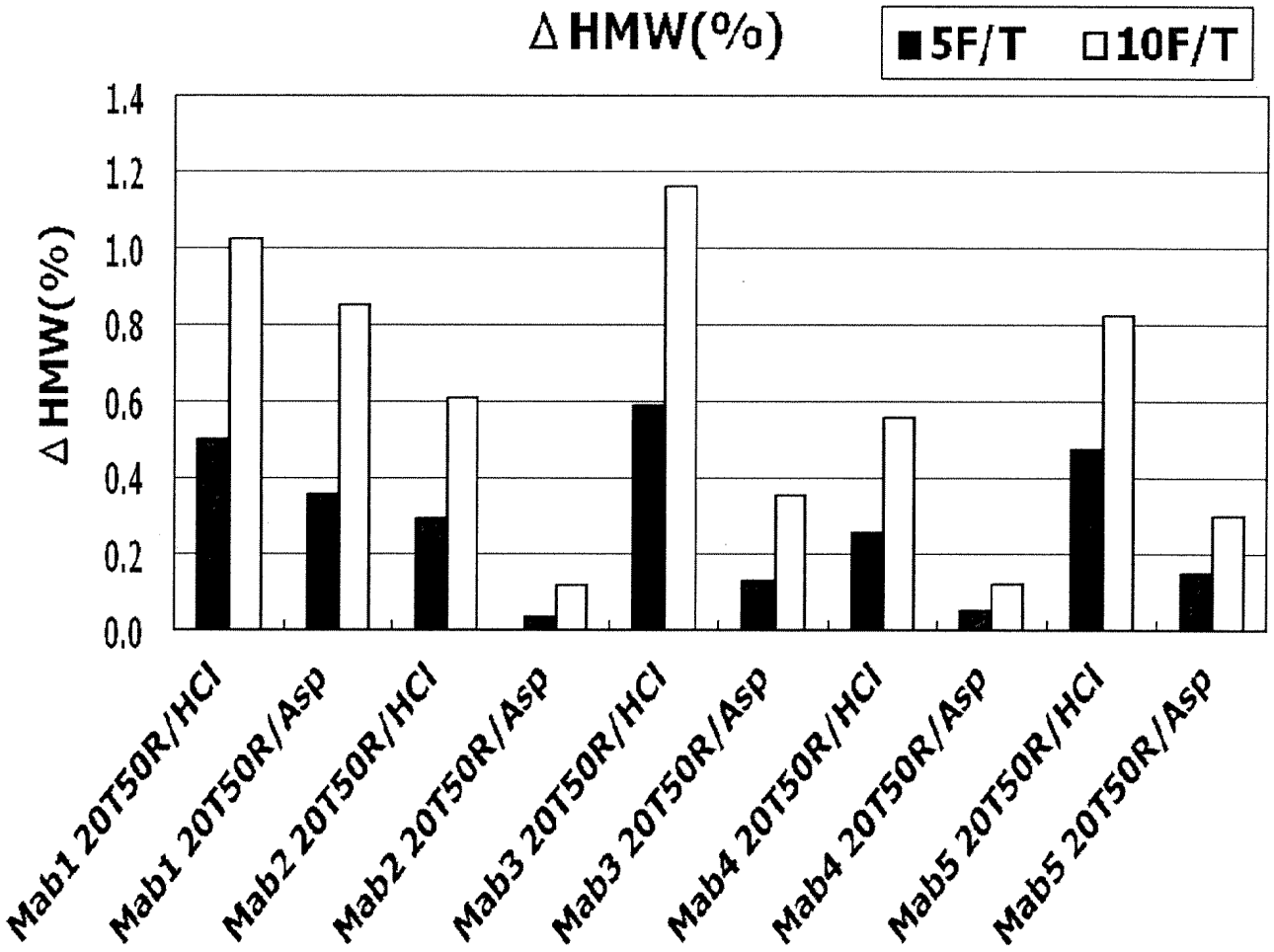

Δ HMW(%)
■5F/T □10F/T
Δ HMW(%)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Mab1 20T50R/HCl
Mab1 20T50R/Asp
Mab2 20T50R/HCl
Mab2 20T50R/Asp
Mab3 20T50R/HCl
Mab3 20T50R/Asp
Mab4 20T50R/HCl
Mab4 20T50R/Asp
Mab5 20T50R/HCl
Mab5 20T50R/Asp

FIG. 22

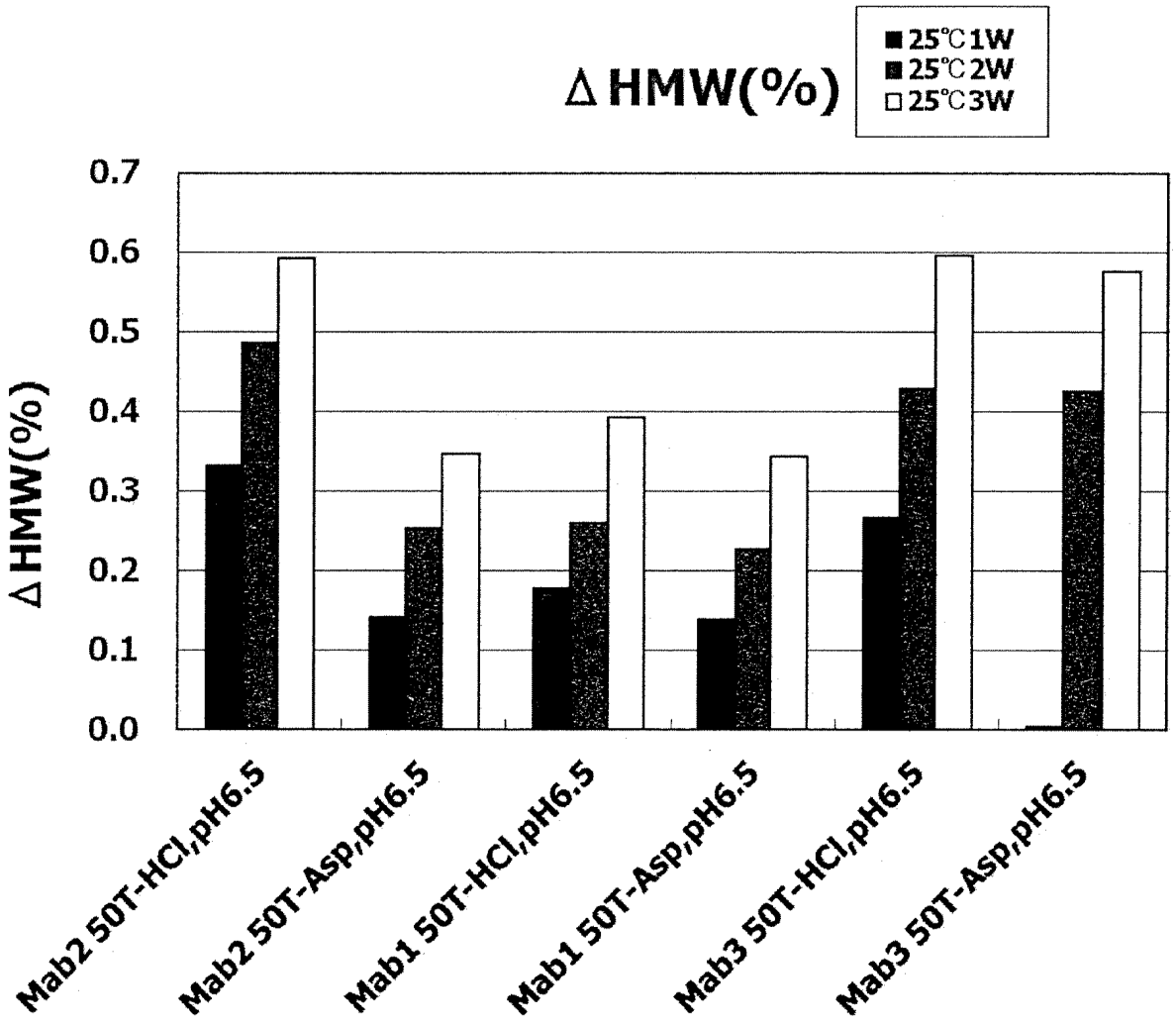

Δ HMW(%)
25℃ 1W
25℃ 2W
25℃ 3W
Δ HMW(%)
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
Mab2 50T-HCl,pH6.5
Mab2 50T-Asp,pH6.5
Mab1 50T-HCl,pH6.5
Mab1 50T-Asp,pH6.5
Mab3 50T-HCl,pH6.5
Mab3 50T-Asp,pH6.5

FIG. 23

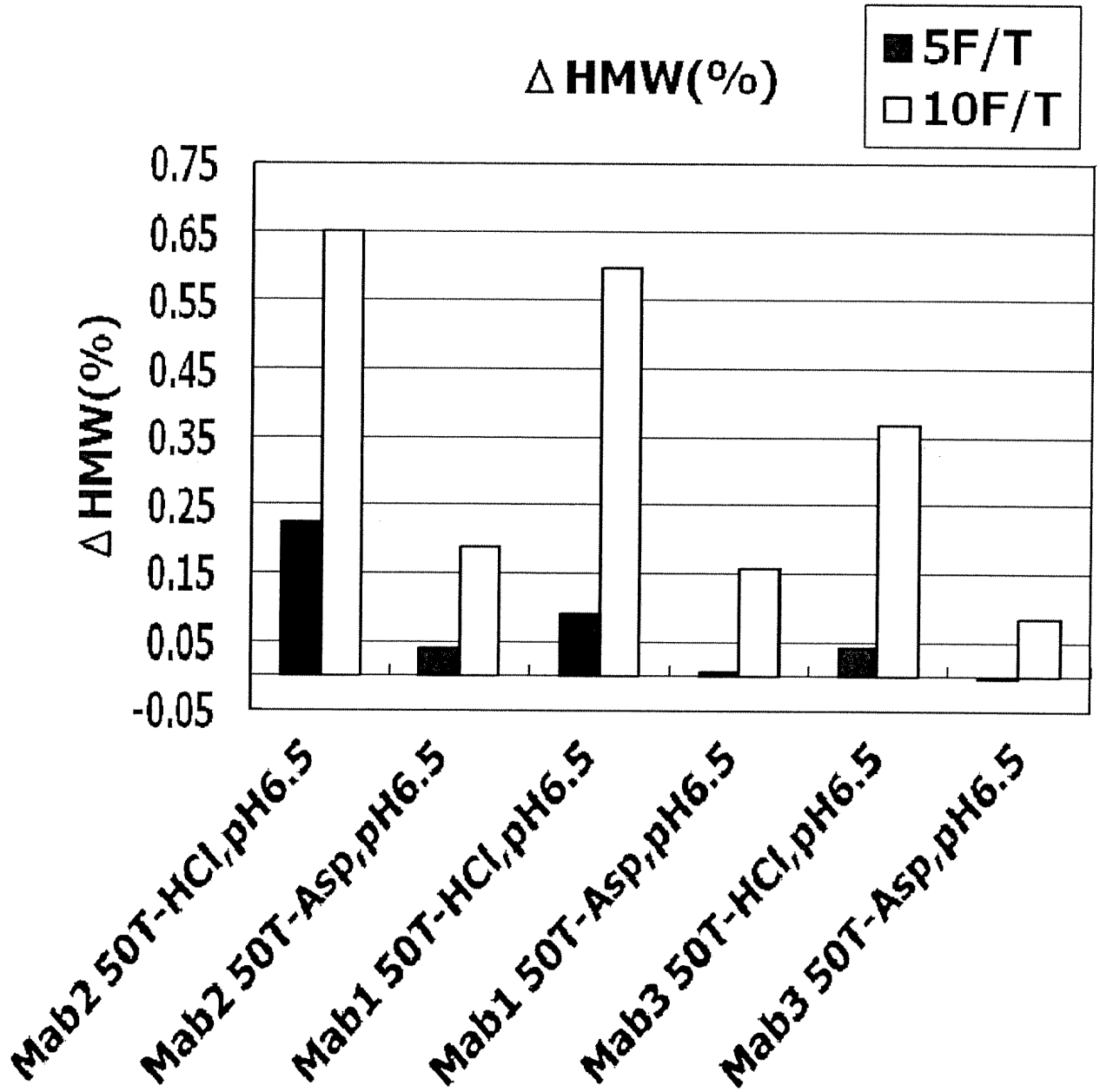

Δ HMW(%)
5F/T
10F/T
Δ HMW(%)
0.75
0.65
0.55
0.45
0.35
0.25
0.15
0.05
-0.05
Mab2 50T-HCl,pH6.5
Mab2 50T-Asp,pH6.5
Mab1 50T-HCl,pH6.5
Mab1 50T-Asp,pH6.5
Mab3 50T-HCl,pH6.5
Mab3 50T-Asp,pH6.5

FIG. 24