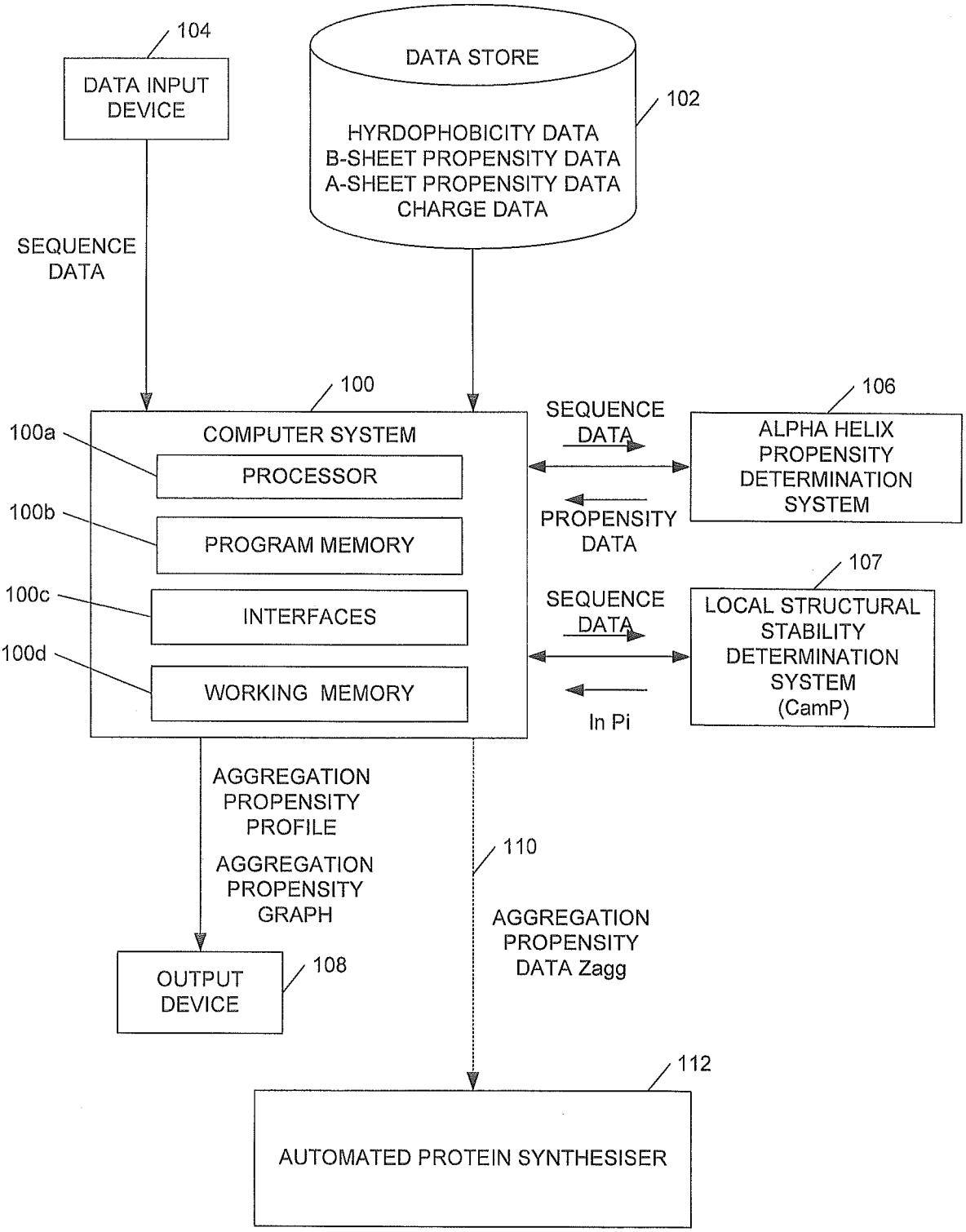

104
DATA INPUT DEVICE
DATA STORE
HYRDOPHOBICITY DATA
B-SHEET PROPENSITY DATA
A-SHEET PROPENSITY DATA
CHARGE DATA
102
SEQUENCE DATA
100
COMPUTER SYSTEM
100a
PROCESSOR
100b
PROGRAM MEMORY
100c
INTERFACES
100d
WORKING MEMORY
SEQUENCE DATA
PROPENSITY DATA
106
ALPHA HELIX PROPENSITY DETERMINATION SYSTEM
SEQUENCE DATA
In Pi
107
LOCAL STRUCTURAL STABILITY DETERMINATION SYSTEM (CamP)
AGGREGATION PROPENSITY PROFILE
AGGREGATION PROPENSITY GRAPH
OUTPUT DEVICE
108
110
AGGREGATION PROPENSITY DATA Zagg
112
AUTOMATED PROTEIN SYNTHESISER

Figure 1a

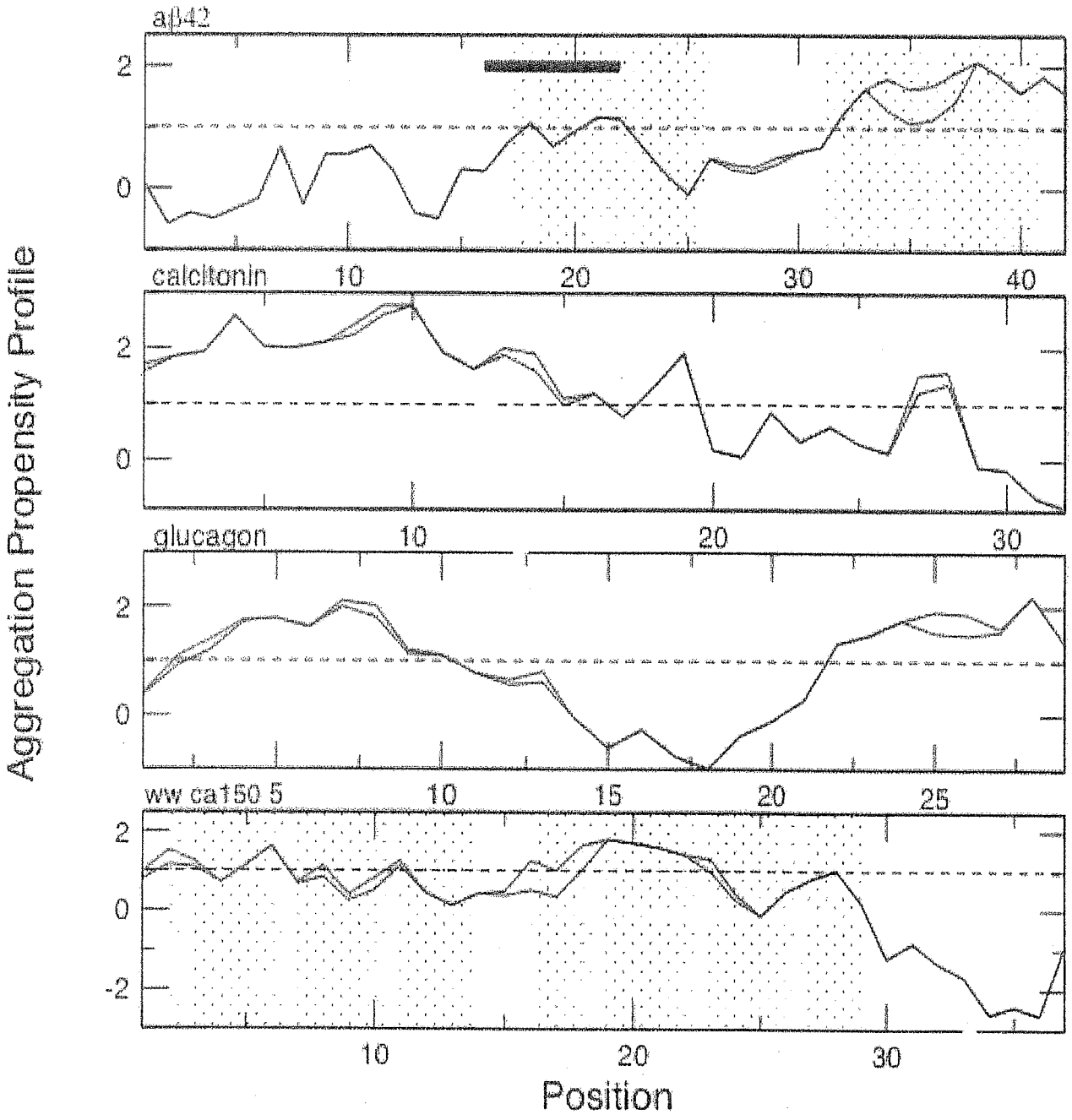

aβ42
calcitonin
glucagon
ww ca150 5
Aggregation Propensity Profile
Position

Figure 1b

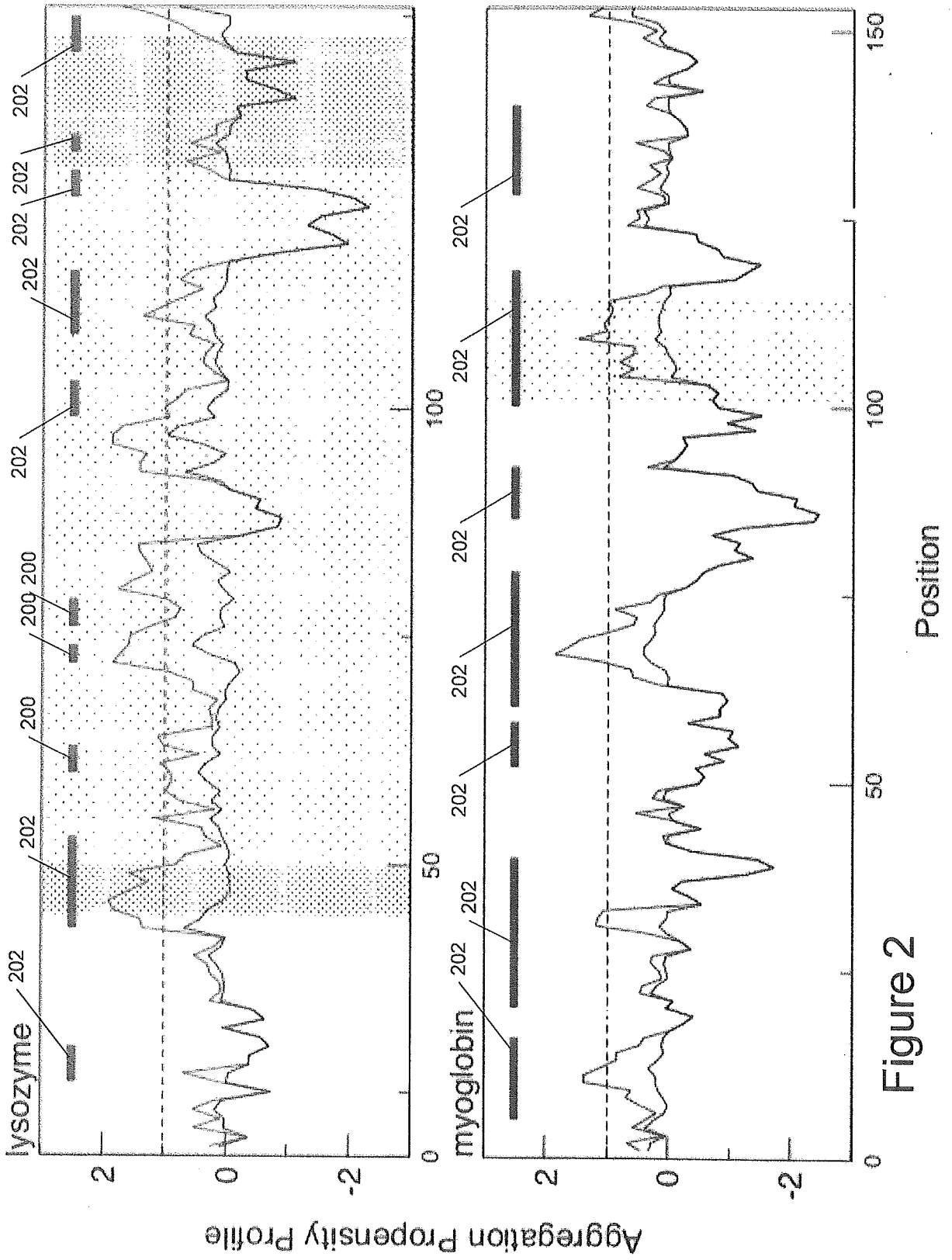
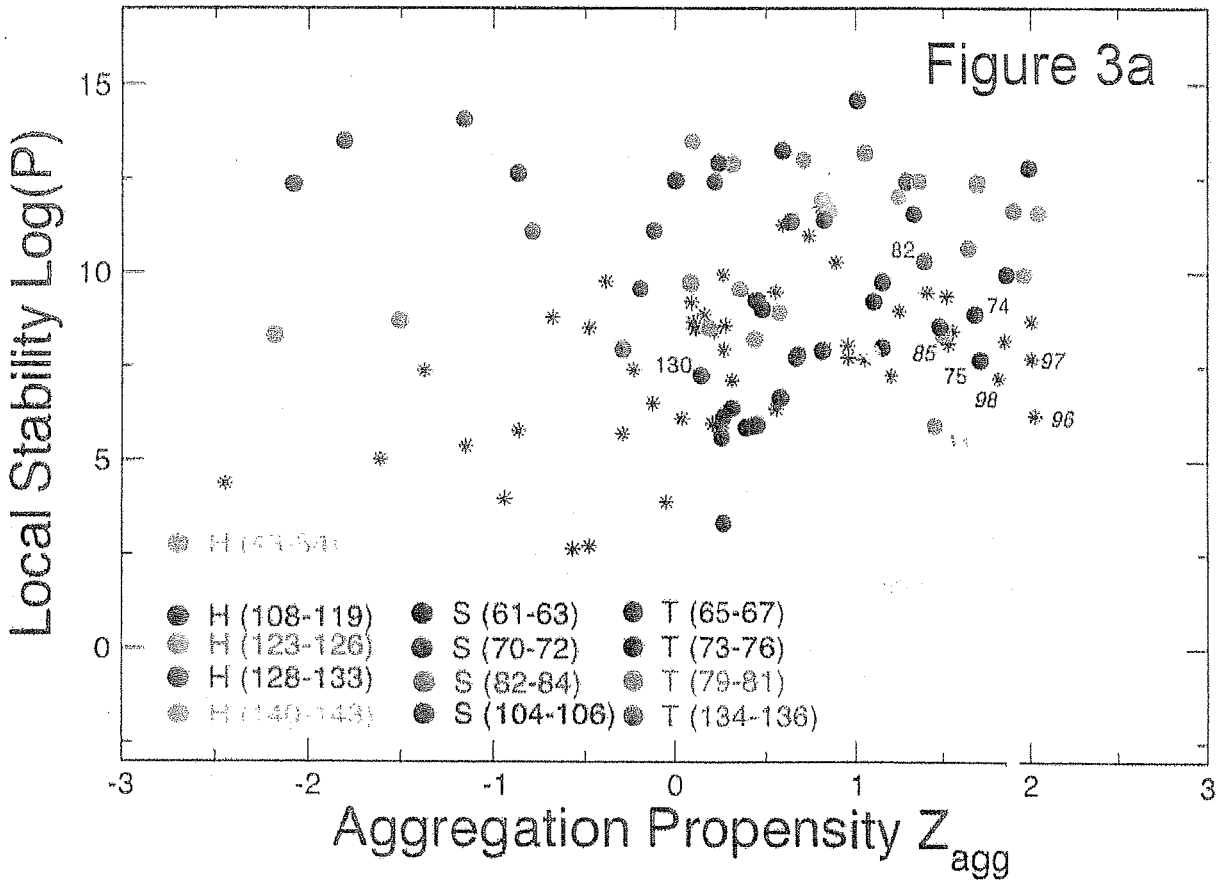
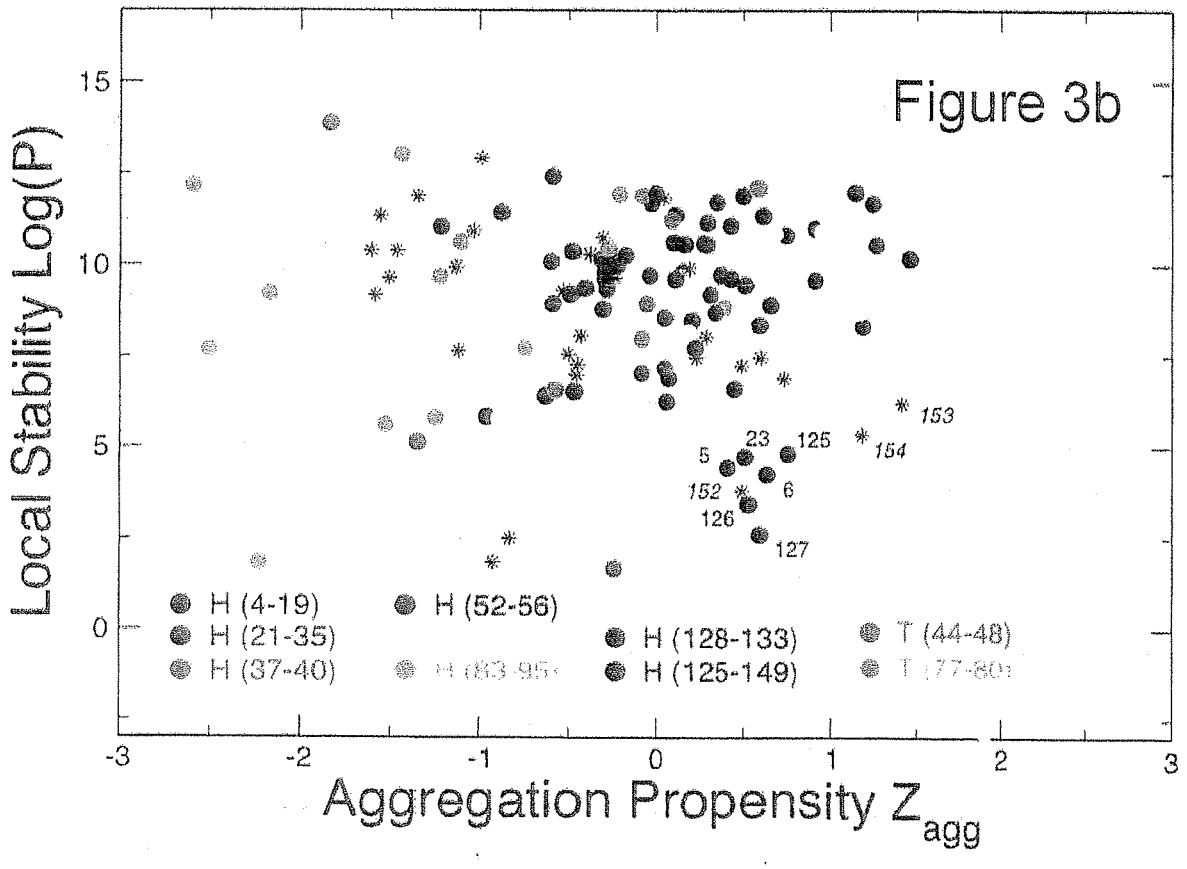

lysozyme
myoglobin
202
200
209
Aggregation Propensity Profile
Position
2
0
-2
0
50
100
150

Figure 2


Figure 3a
Local Stability Log(P)
Aggregation Propensity Z_{agg}
H (108-119)
H (123-126)
H (128-133)
S (61-63)
S (70-72)
S (82-84)
S (104-106)
T (65-67)
T (73-76)
T (79-81)
T (134-136)
82
74
85
130
75
97
98
96


Figure 3b
Local Stability Log(P)
Aggregation Propensity Z_{agg}
H (4-19)
H (21-35)
H (37-40)
H (52-56)
H (128-133)
H (125-149)
T (44-48)
153
154
23
125
5
152
6
126
127

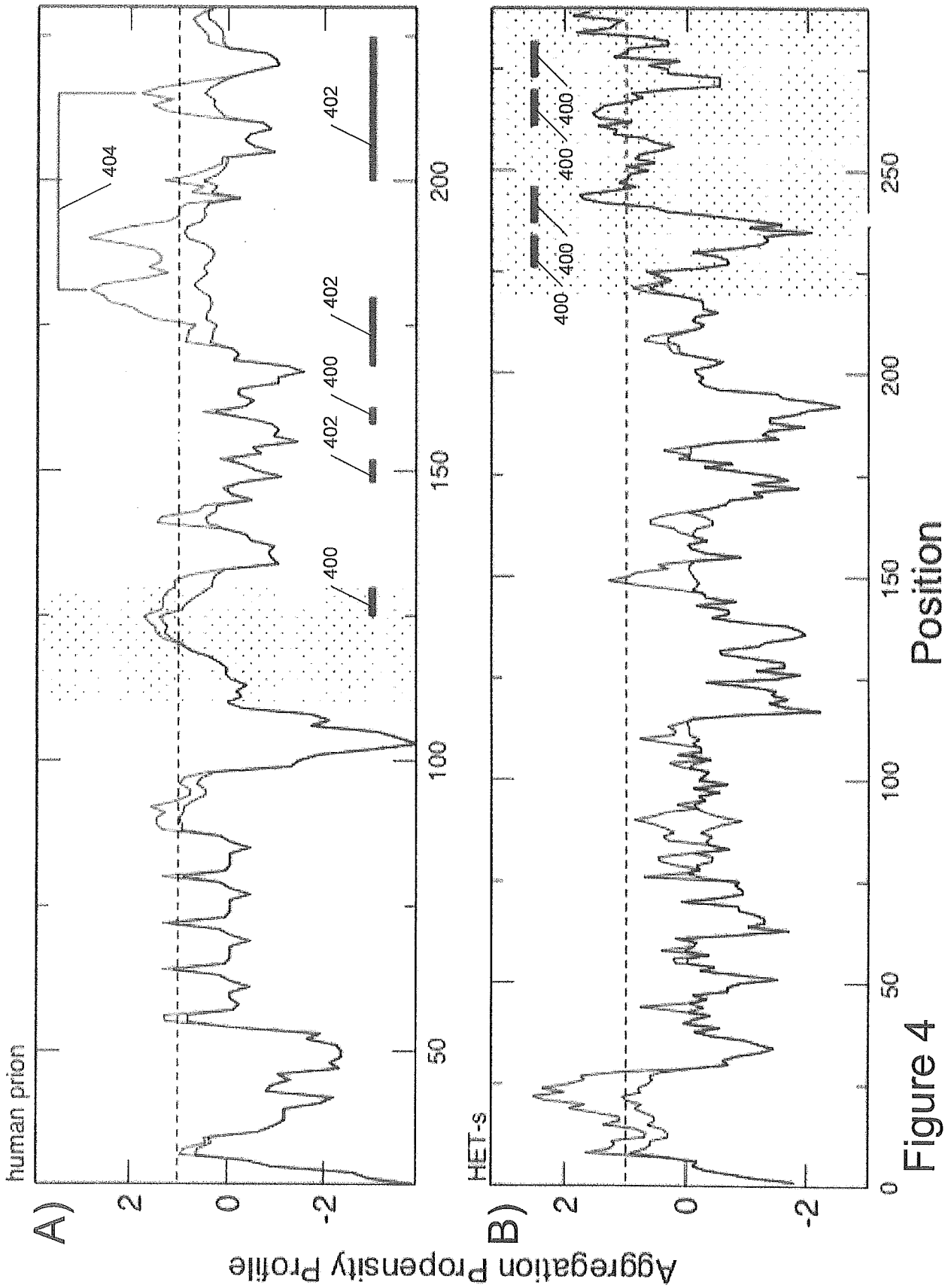

A)
human prion
404
402
400
402
400
402
400
B)
HET-s
400
400
400
400
Aggregation Propensity Profile
2
0
-2
50
100
150
200
250
Position

Figure 4

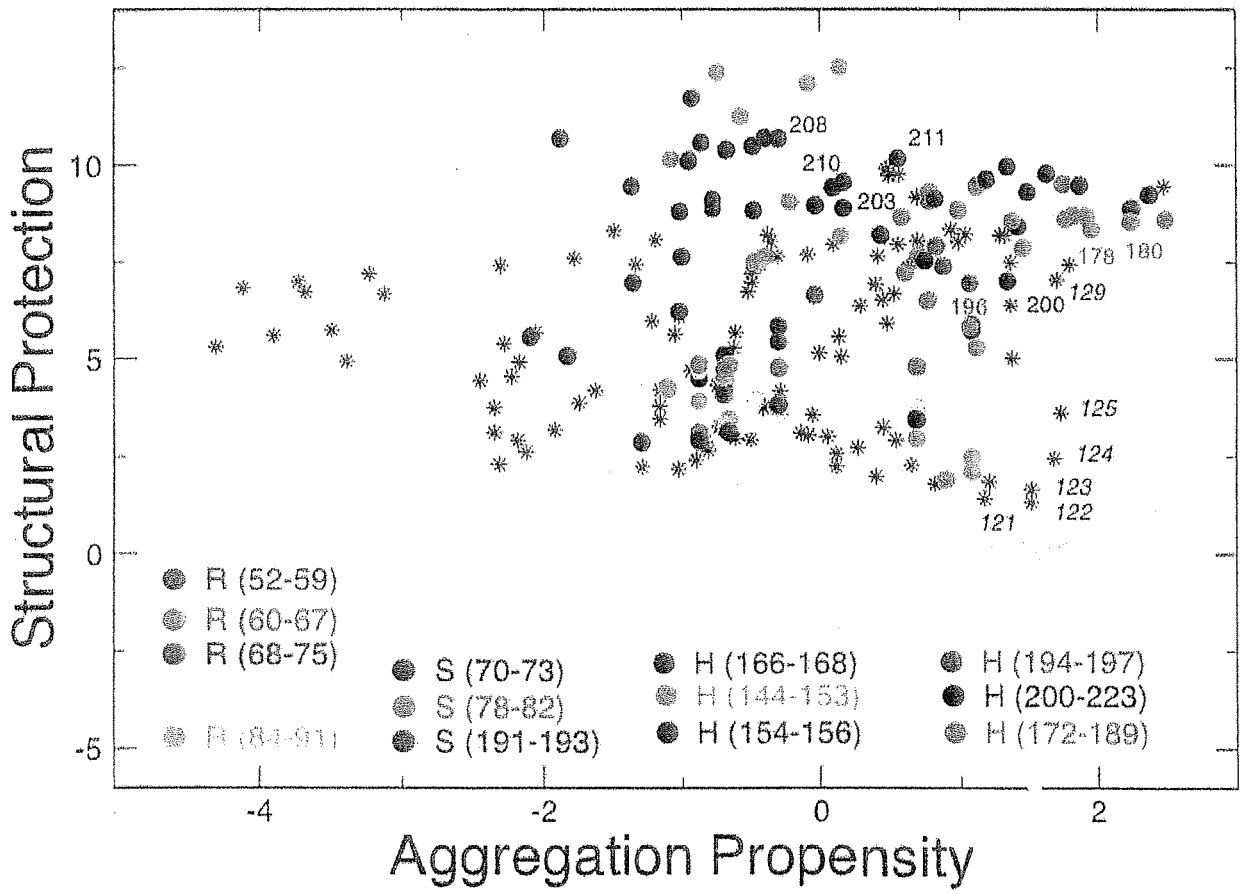

Structural Protection
10
5
0
-5
-4
-2
0
2
Aggregation Propensity
208
211
210
203
178
180
196
200
129
125
124
123
122
121
R (52-59)
R (60-67)
R (68-75)
S (70-73)
S (78-82)
S (191-193)
H (166-168)
H (144-153)
H (154-156)
H (194-197)
H (200-223)
H (172-189)

Figure 5