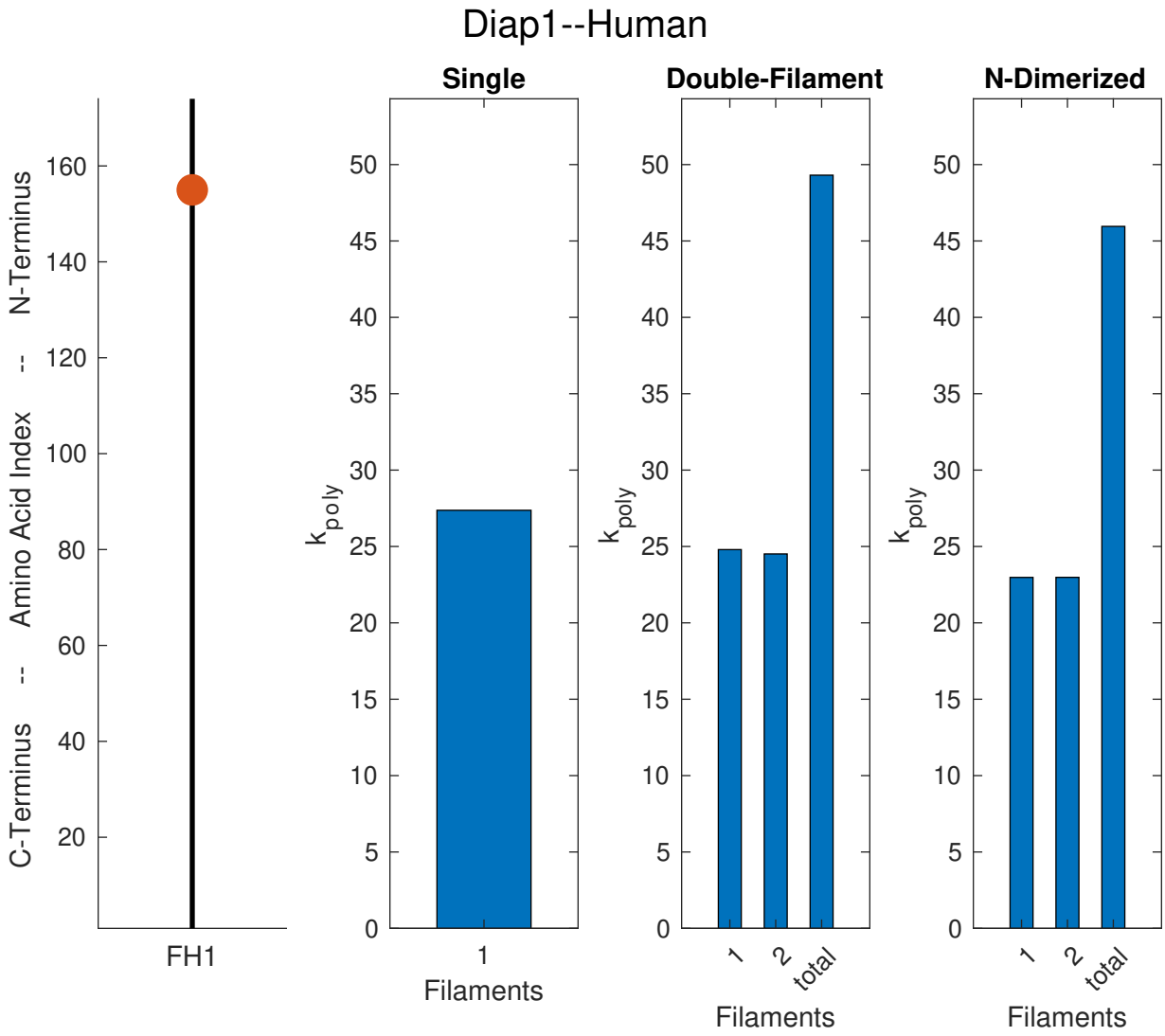
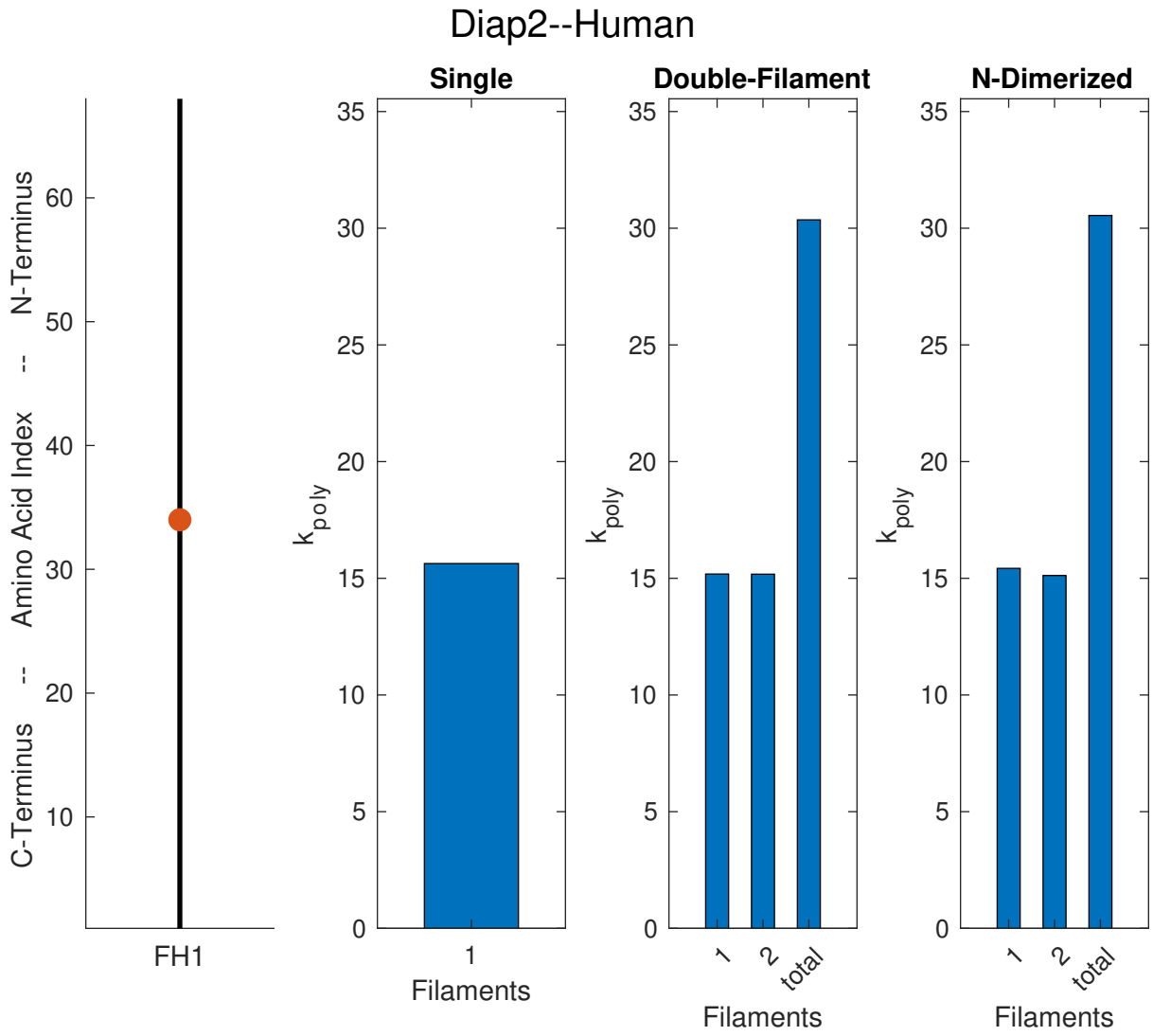
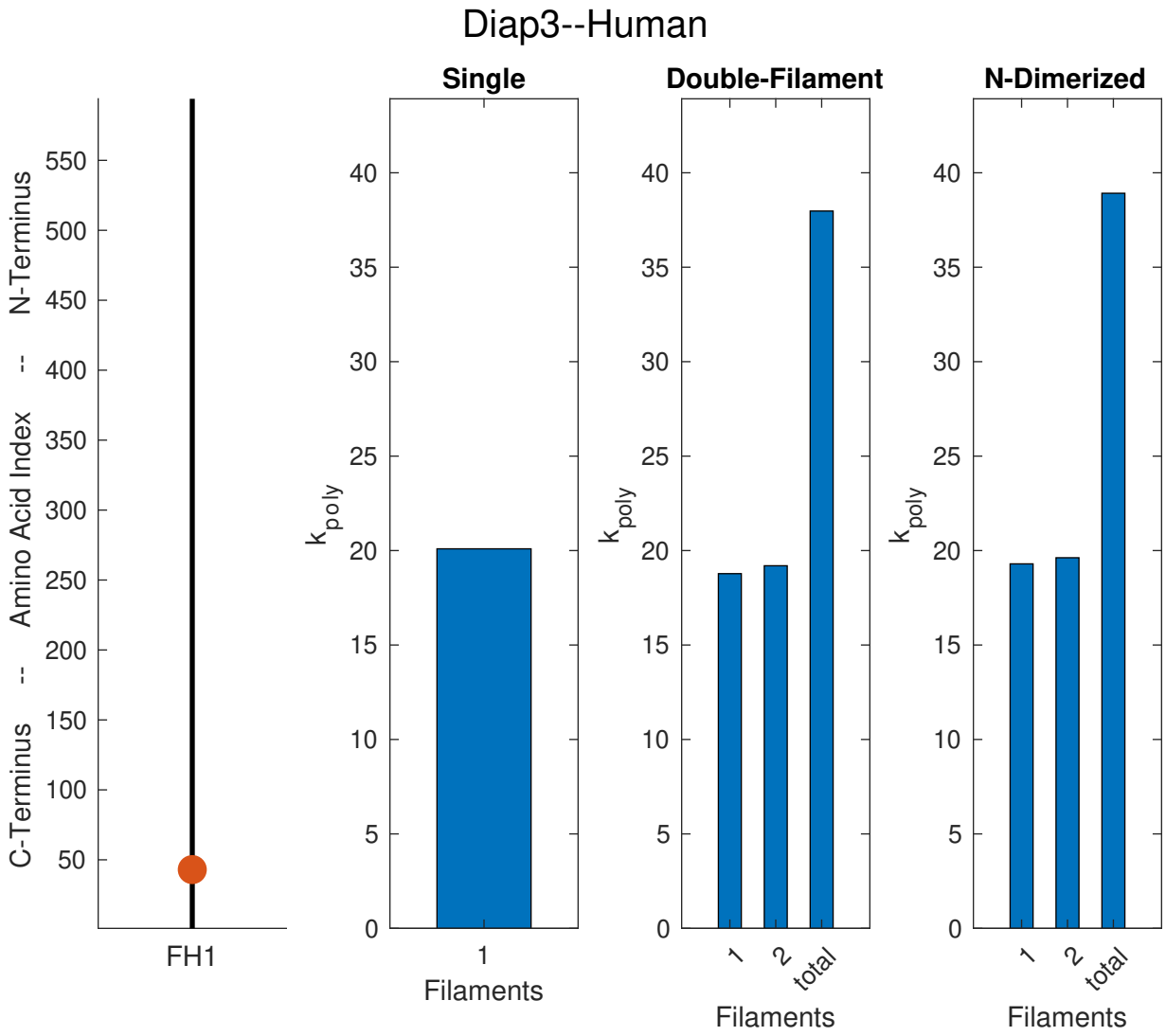
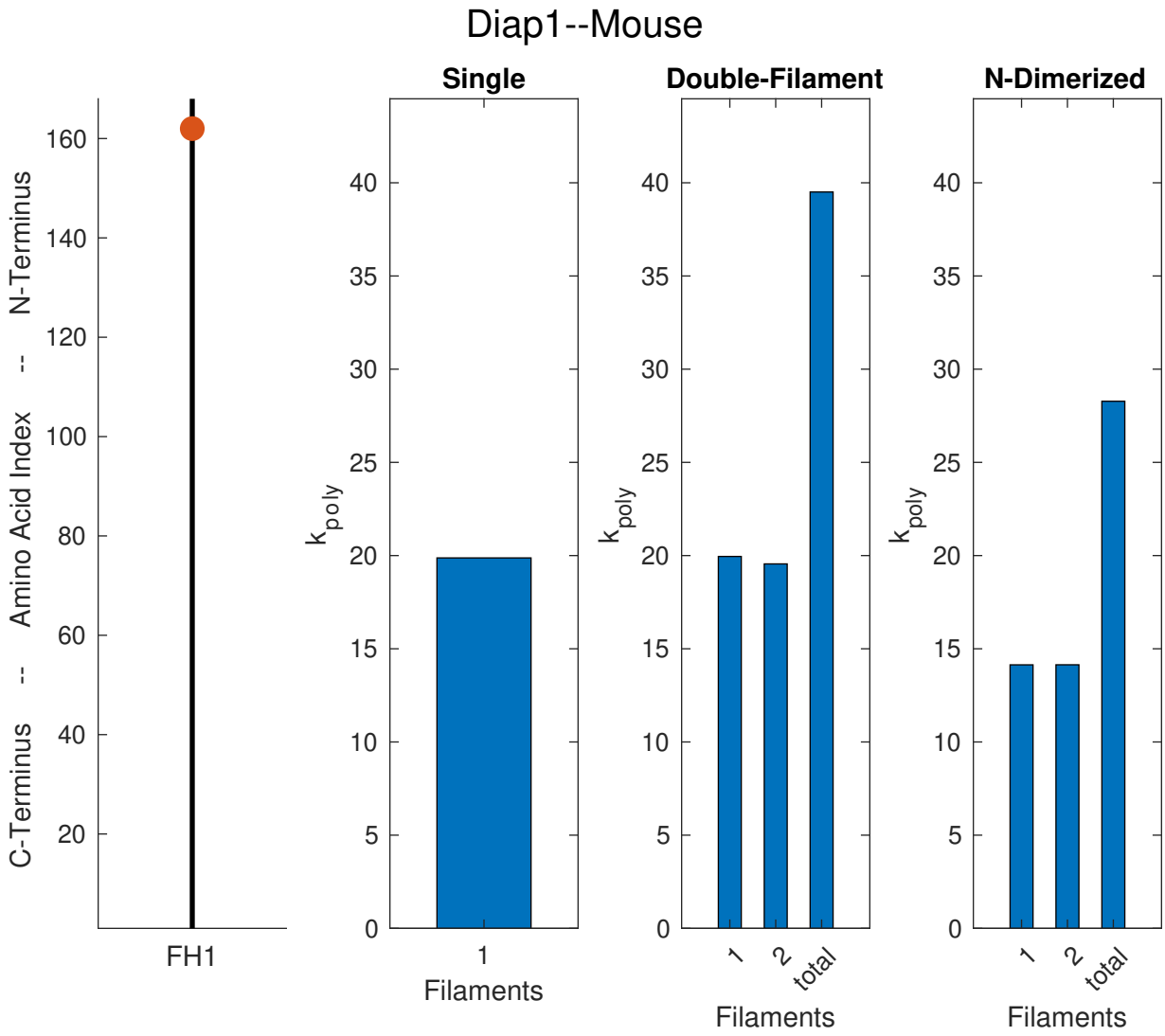
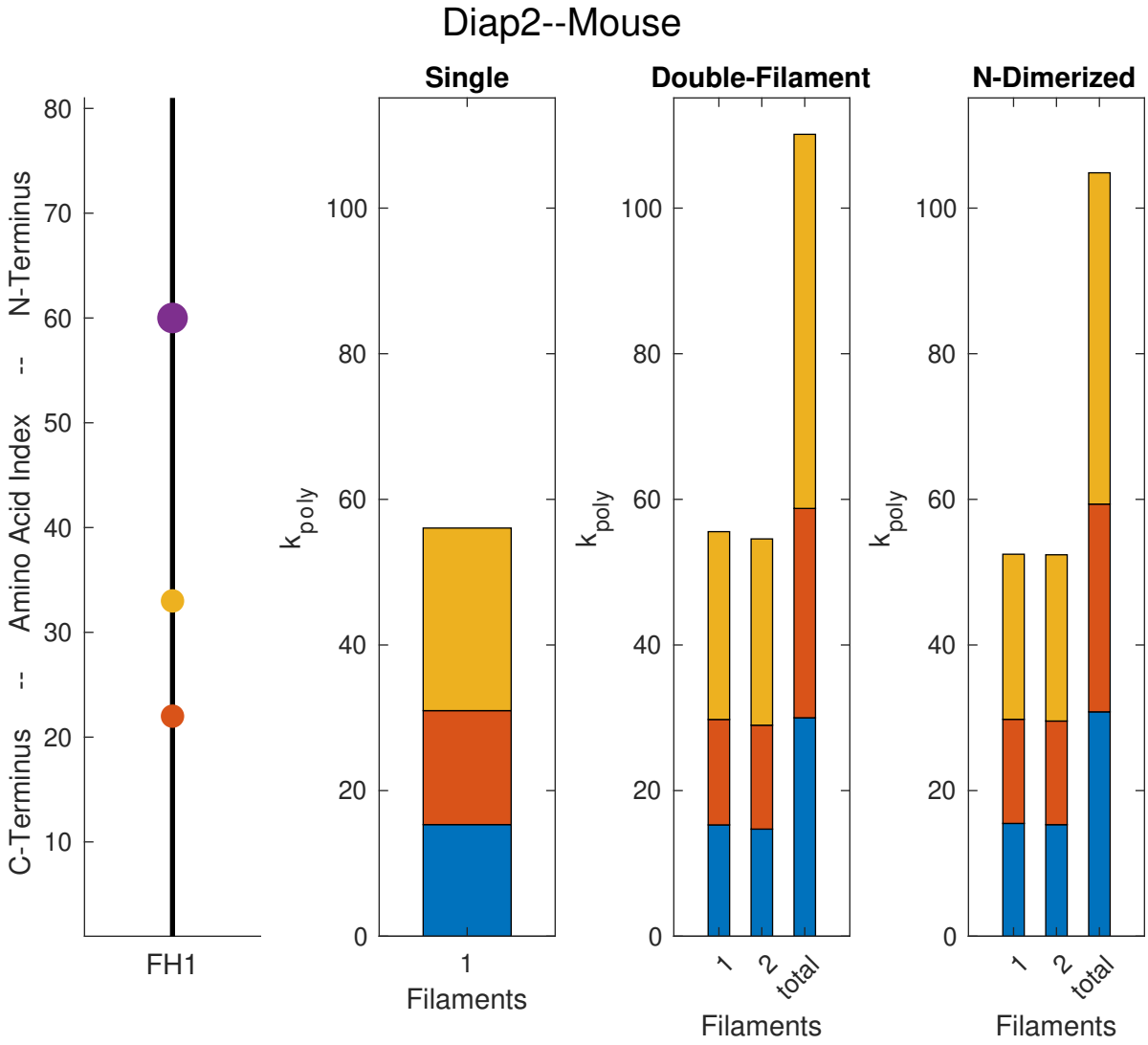
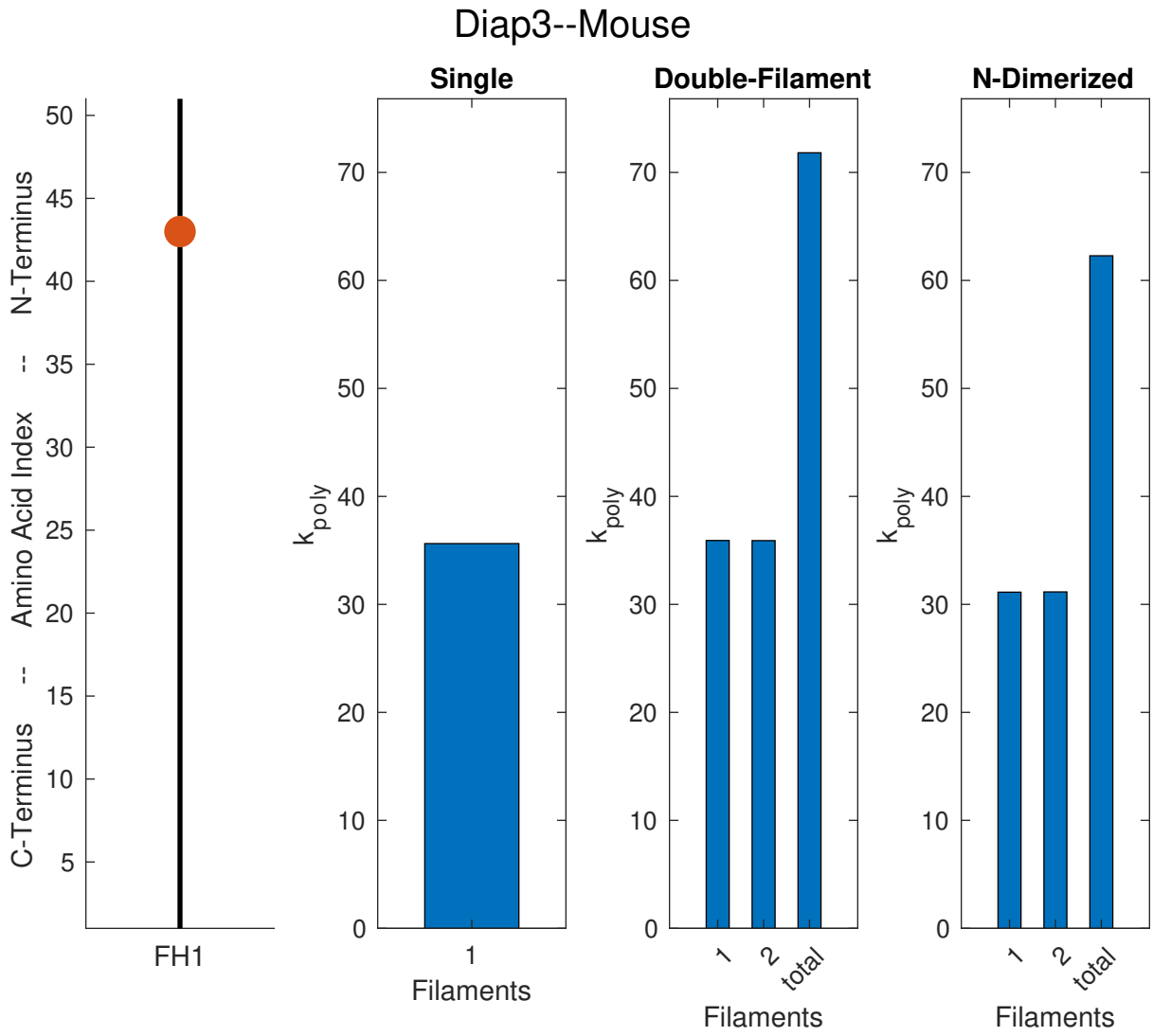

Diap1--Human
Single
Double-Filament
N-Dimerized
C-Terminus -- Amino Acid Index -- N-Terminus
20
40
60
80
100
120
140
160
FH1
k_{poly}
0
5
10
15
20
25
30
35
40
45
50
1
Filaments
1
2
total
Filaments
Filaments

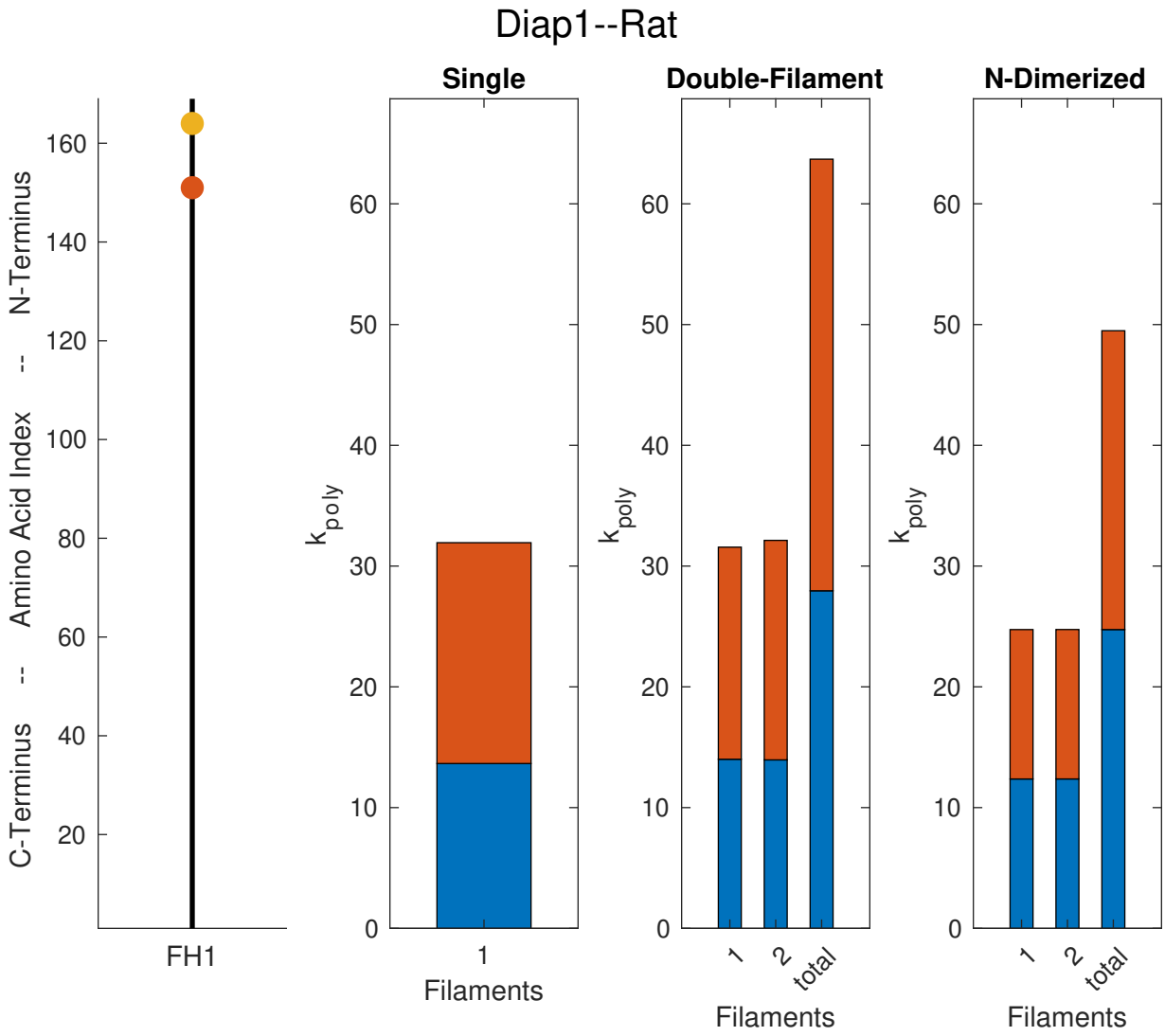

Diap2--Human
Single
Double-Filament
N-Dimerized
C-Terminus -- Amino Acid Index -- N-Terminus
10
20
30
40
50
60
FH1
k_{poly}
0
5
10
15
20
25
30
35
1
2
total
Filaments

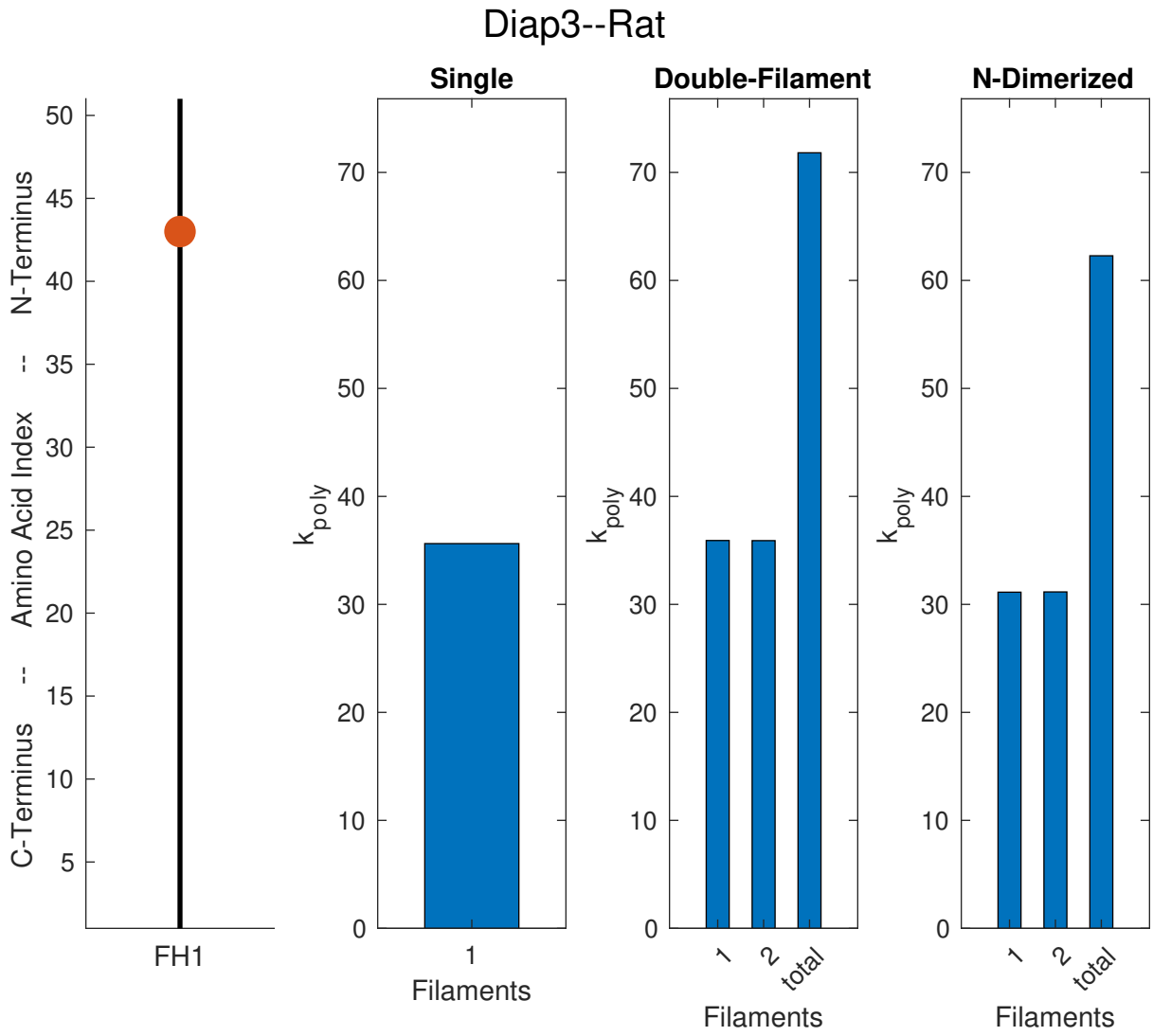

Diap3--Human
Single
Double-Filament
N-Dimerized
C-Terminus -- Amino Acid Index -- N-Terminus
550
500
450
400
350
300
250
200
150
100
50
FH1
k poly
40
35
30
25
20
15
10
5
0
1
Filaments
1
2
total
Filaments
Filaments

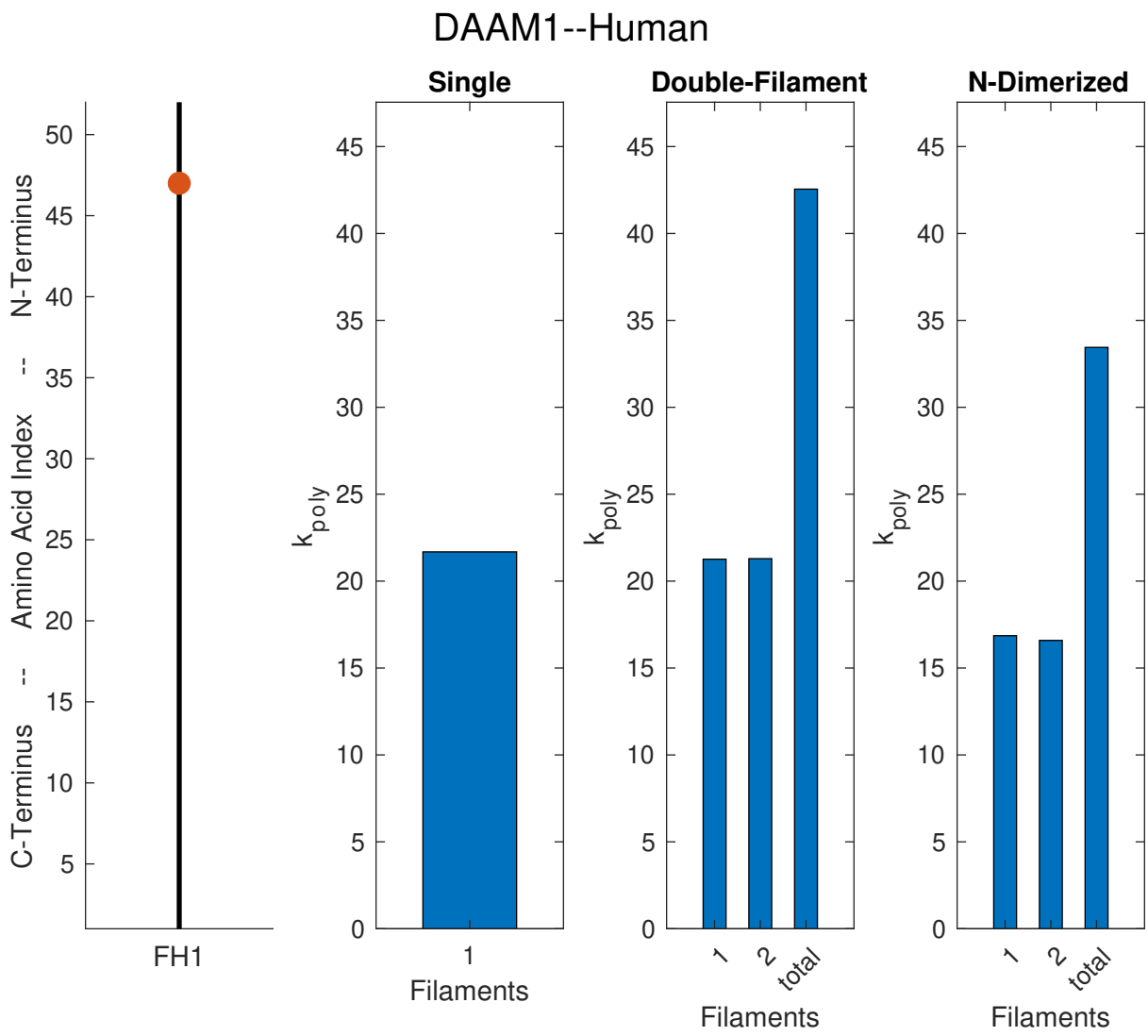

Diap1--Mouse
C-Terminus -- Amino Acid Index -- N-Terminus
20
40
60
80
100
120
140
160
FH1
Single
Double-Filament
N-Dimerized
k_{poly}
0
5
10
15
20
25
30
35
40
1
2
total
Filaments

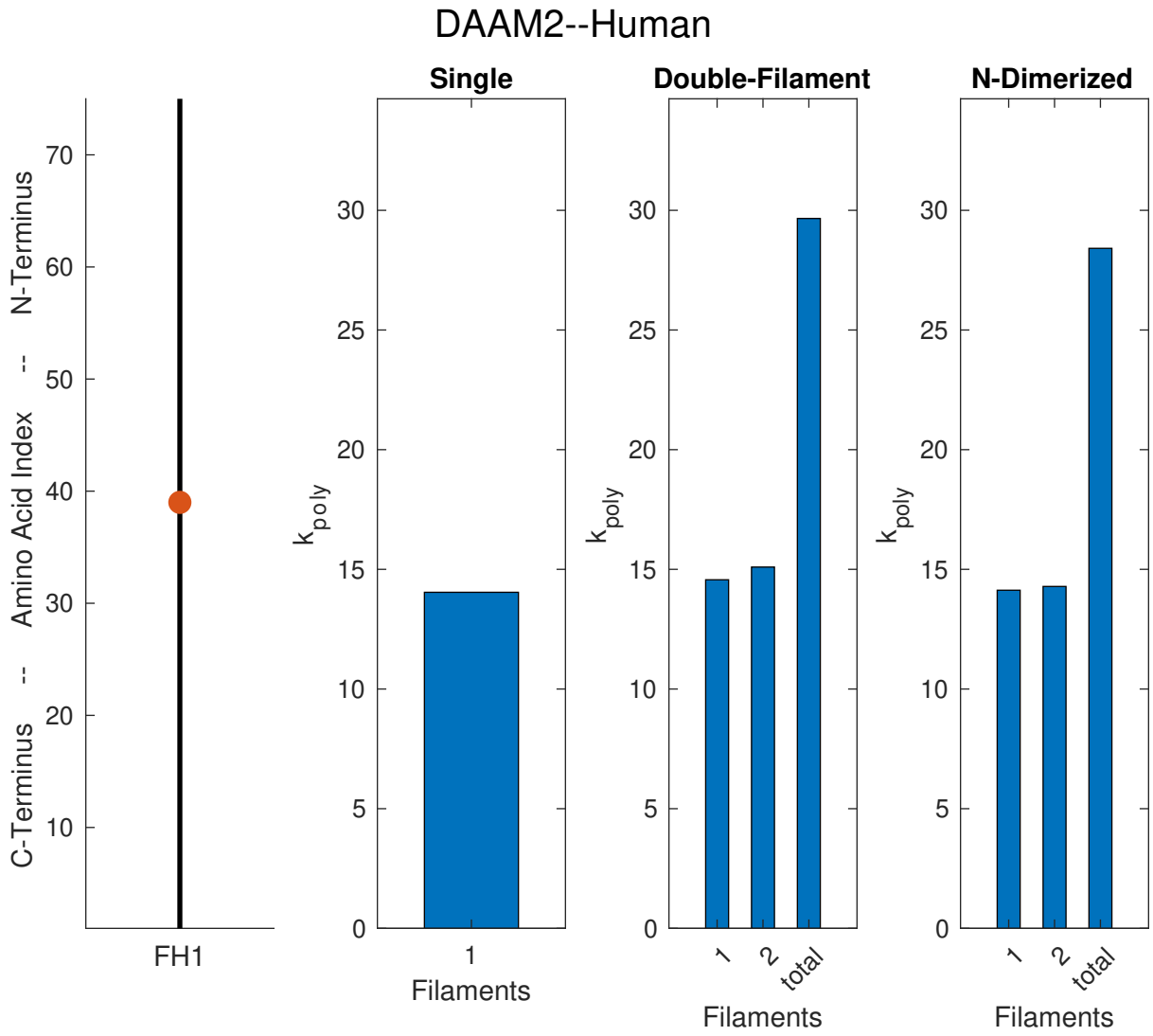

Diap2--Mouse
C-Terminus -- Amino Acid Index -- N-Terminus
80
70
60
50
40
30
20
10
FH1
Single
Double-Filament
N-Dimerized
k poly
100
80
60
40
20
0
1
2
total
Filaments

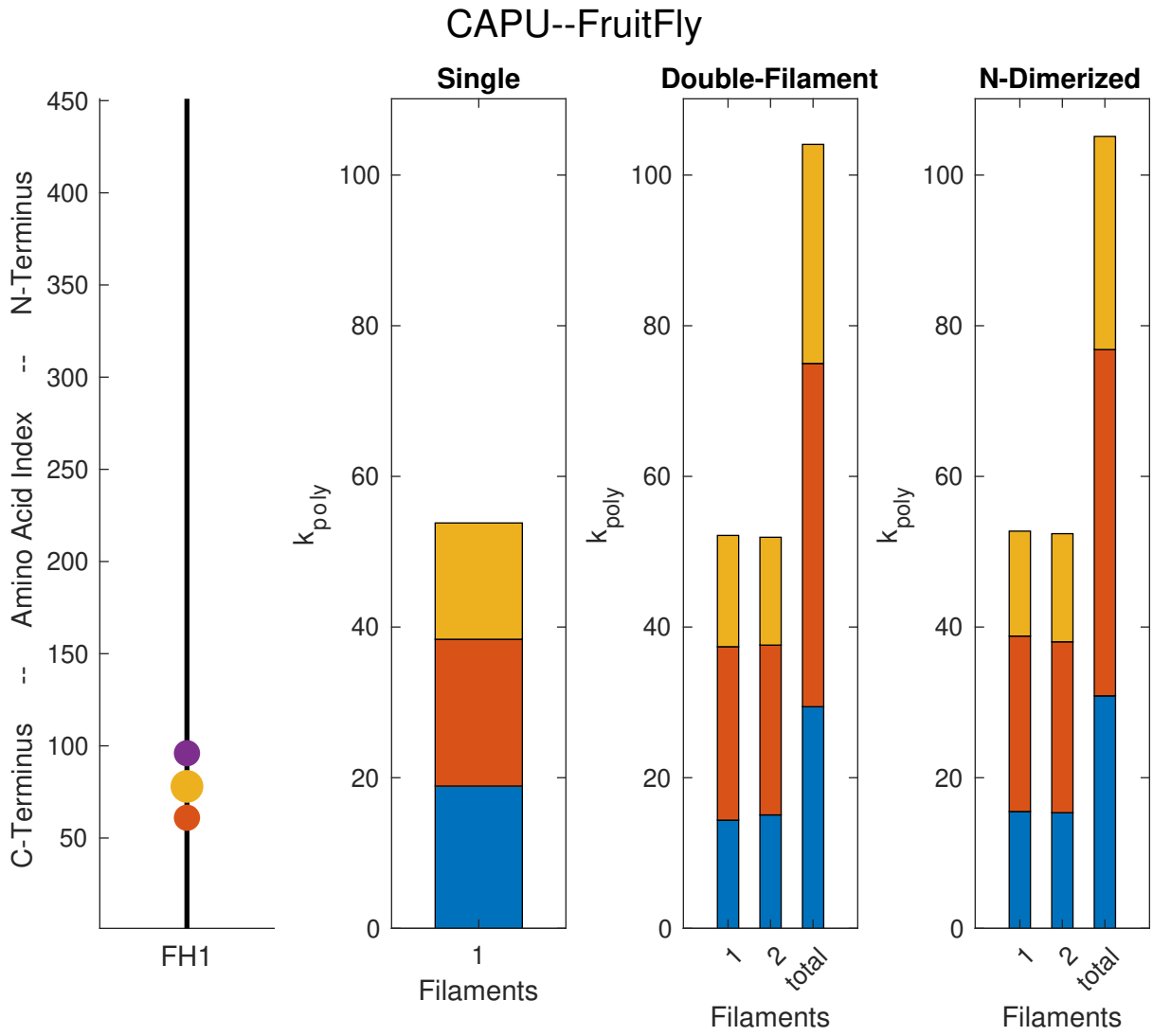

Diap3--Mouse
C-Terminus -- Amino Acid Index -- N-Terminus
FH1
Single
Double-Filament
N-Dimerized
k poly
Filaments
1
2
total

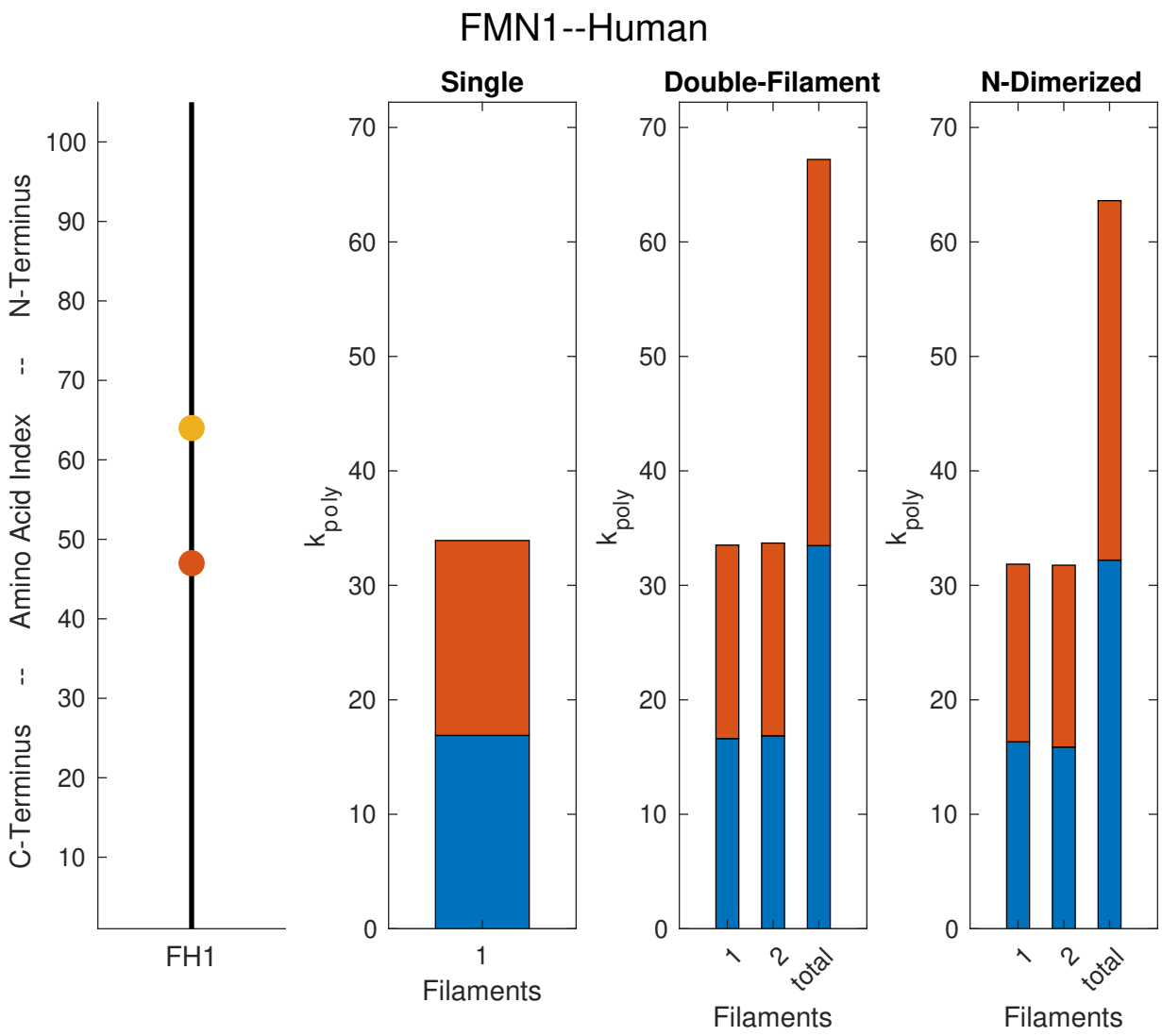

Diap1--Rat
C-Terminus -- Amino Acid Index -- N-Terminus
20
40
60
80
100
120
140
160
FH1
Single
Double-Filament
N-Dimerized
k_{poly}
0
10
20
30
40
50
60
1
2
total
Filaments

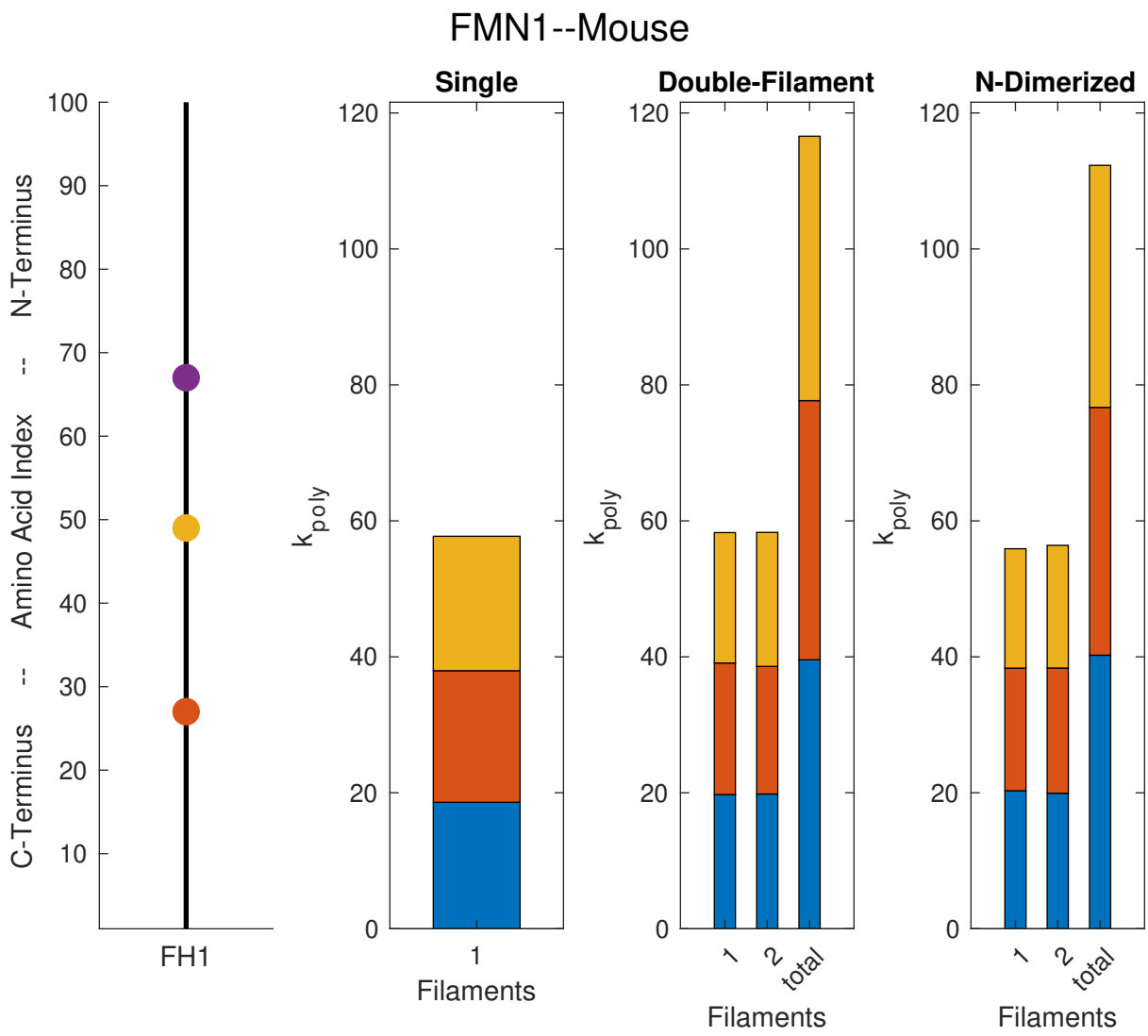

Diap3--Rat
Single
Double-Filament
N-Dimerized
C-Terminus -- Amino Acid Index -- N-Terminus
50
45
40
35
30
25
20
15
10
5
FH1
k_{poly}
70
60
50
40
30
20
10
0
1
Filaments
1
2
total
Filaments
Filaments

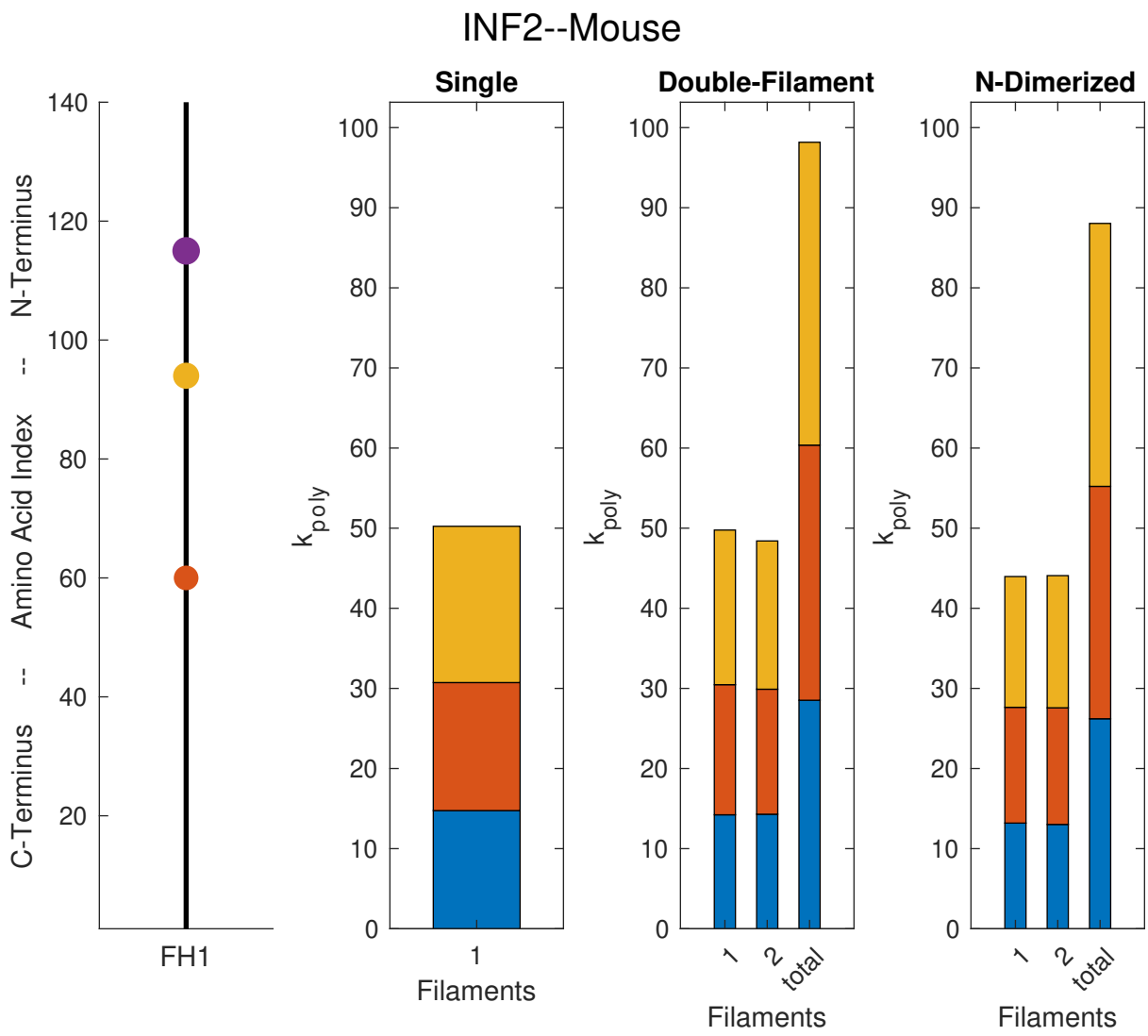

DAAM1--Human
Single
Double-Filament
N-Dimerized
C-Terminus -- Amino Acid Index -- N-Terminus
FH1
k_{poly}
Filaments
1
2
total

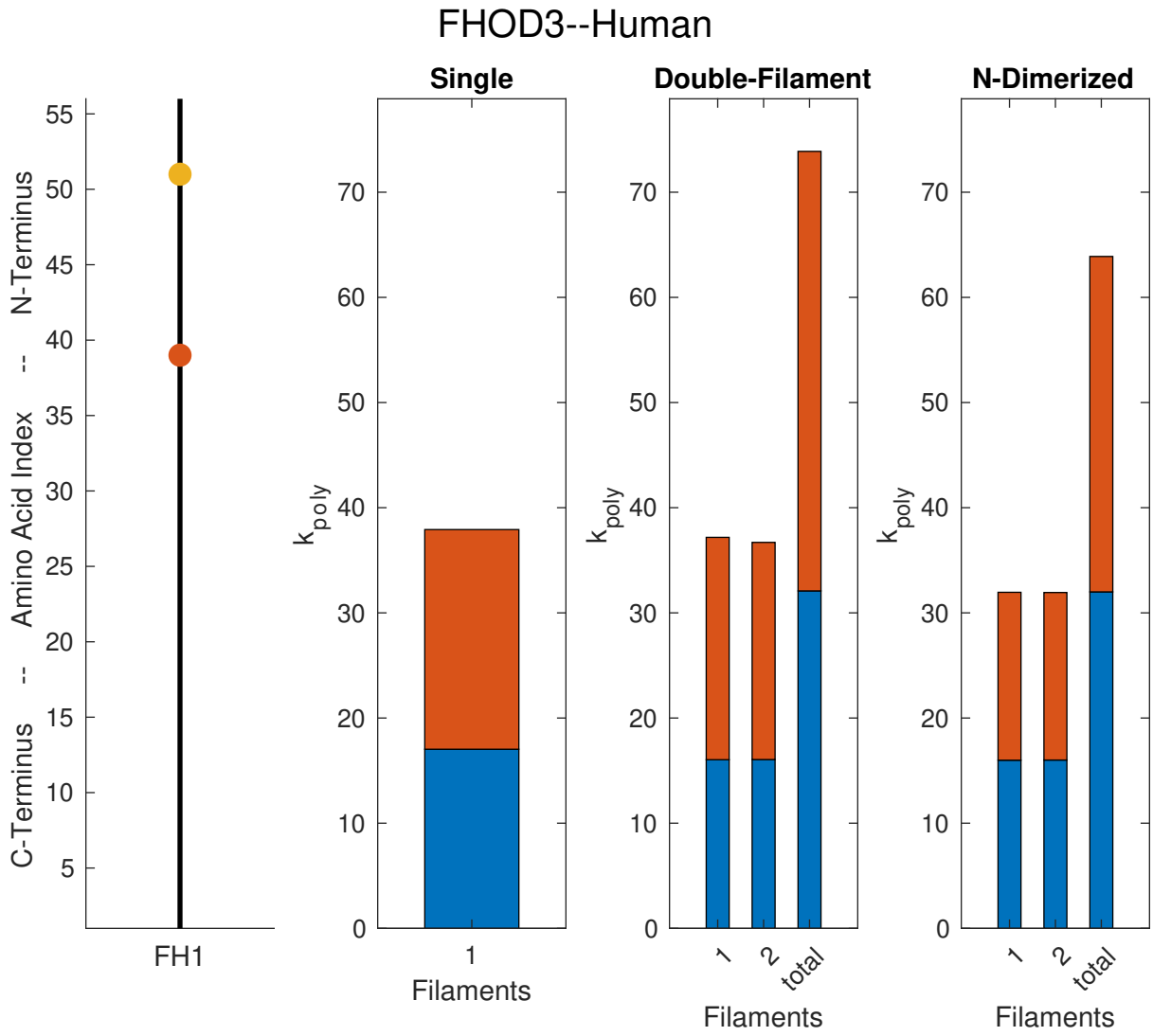

DAAM2--Human
Single
Double-Filament
N-Dimerized
C-Terminus -- Amino Acid Index -- N-Terminus
10
20
30
40
50
60
70
FH1
k_{poly}
0
5
10
15
20
25
30
1
Filaments
1
2
total
Filaments
Filaments

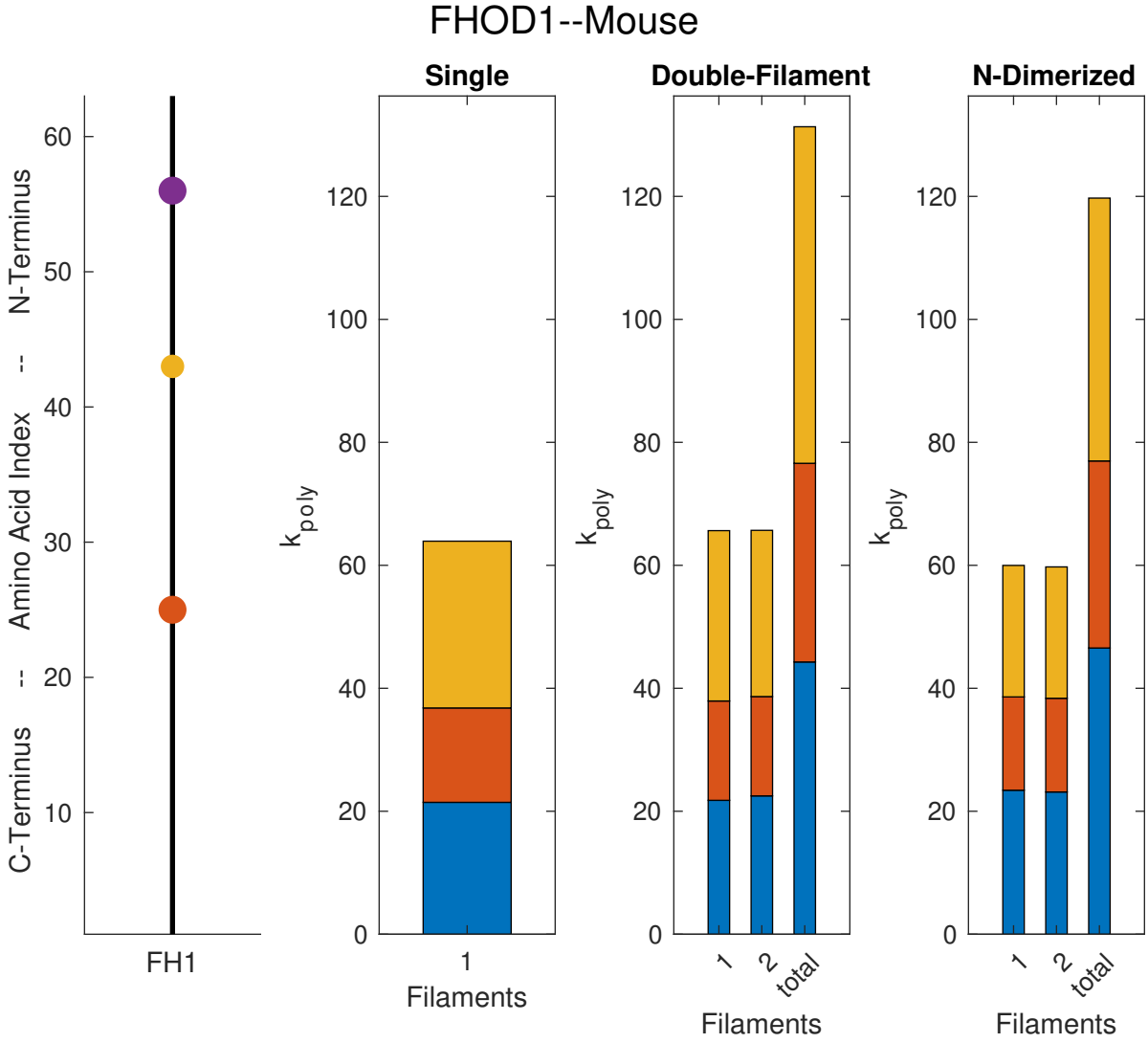

CAPU--FruitFly
C-Terminus -- Amino Acid Index -- N-Terminus
450
400
350
300
250
200
150
100
50
FH1
Single
Double-Filament
N-Dimerized
k_{poly}
100
80
60
40
20
0
1
2
total
Filaments

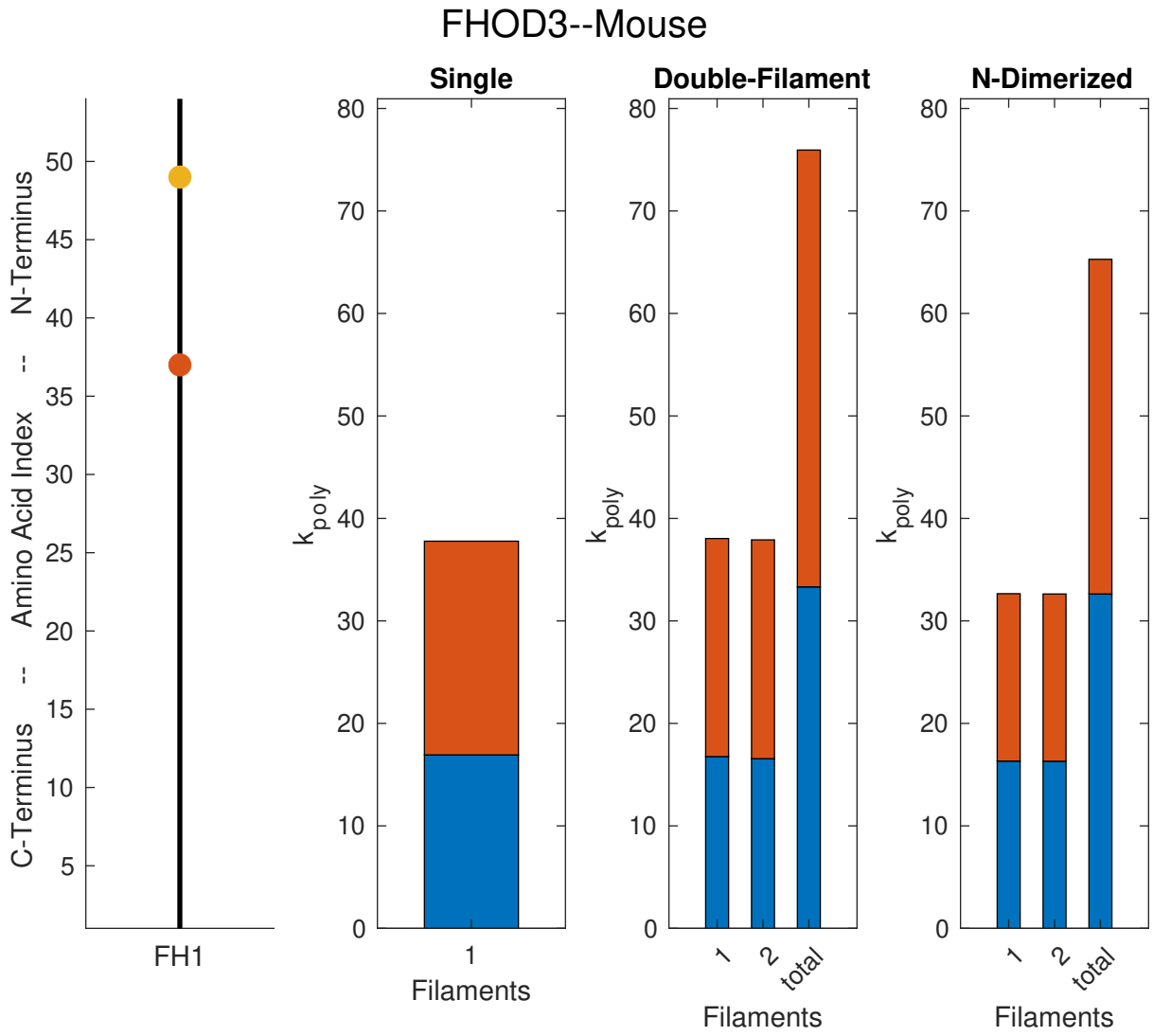

FMN1--Human
C-Terminus -- Amino Acid Index -- N-Terminus
100
90
80
70
60
50
40
30
20
10
FH1
Single
Double-Filament
N-Dimerized
k_{poly}
70
60
50
40
30
20
10
0
1
Filaments
1
2
total
Filaments
Filaments

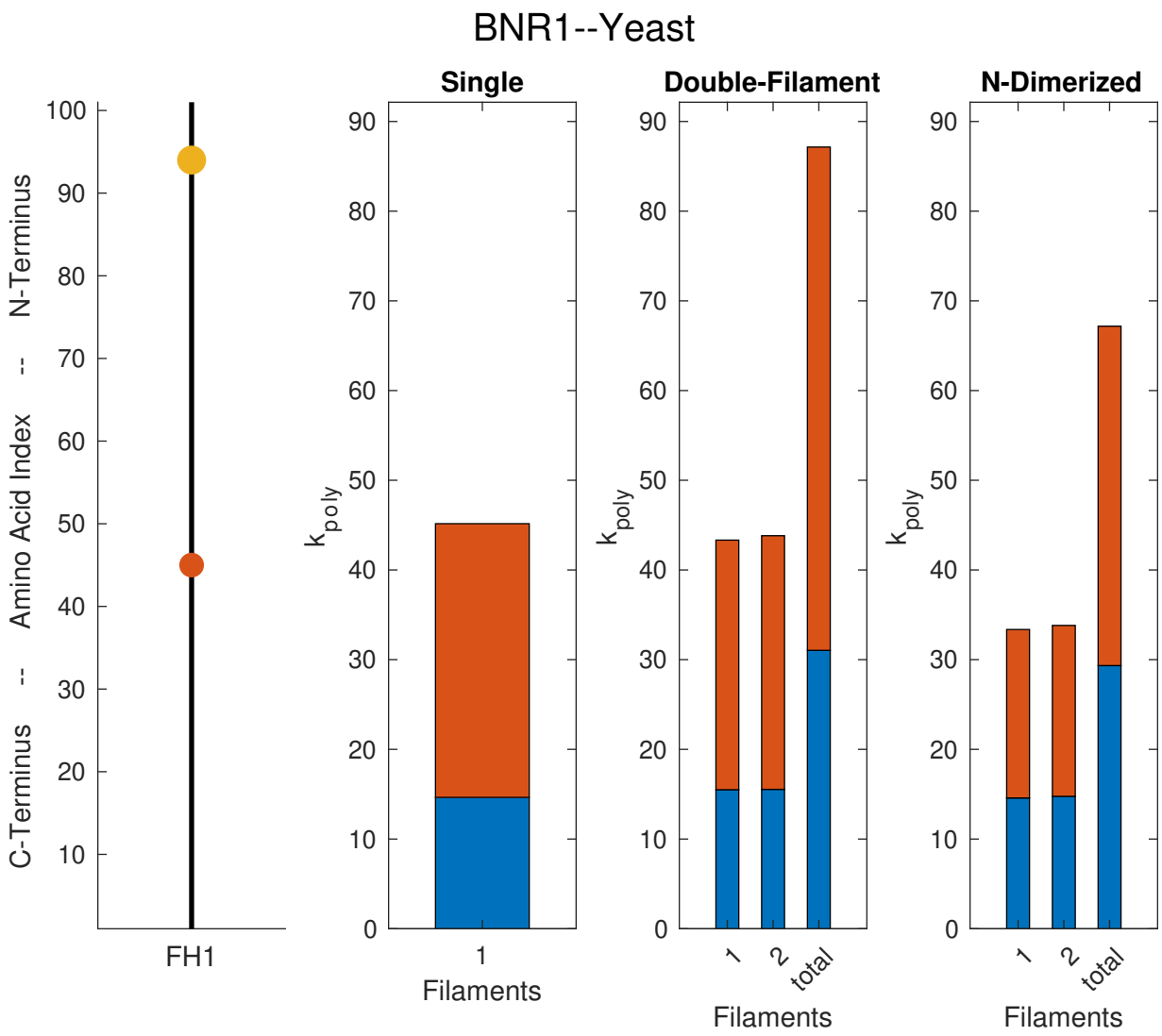

FMN1--Mouse
C-Terminus -- Amino Acid Index -- N-Terminus
100
90
80
70
60
50
40
30
20
10
FH1
Single
Double-Filament
N-Dimerized
k_{poly}
120
100
80
60
40
20
0
1
Filaments
1
2
total
Filaments
Filaments

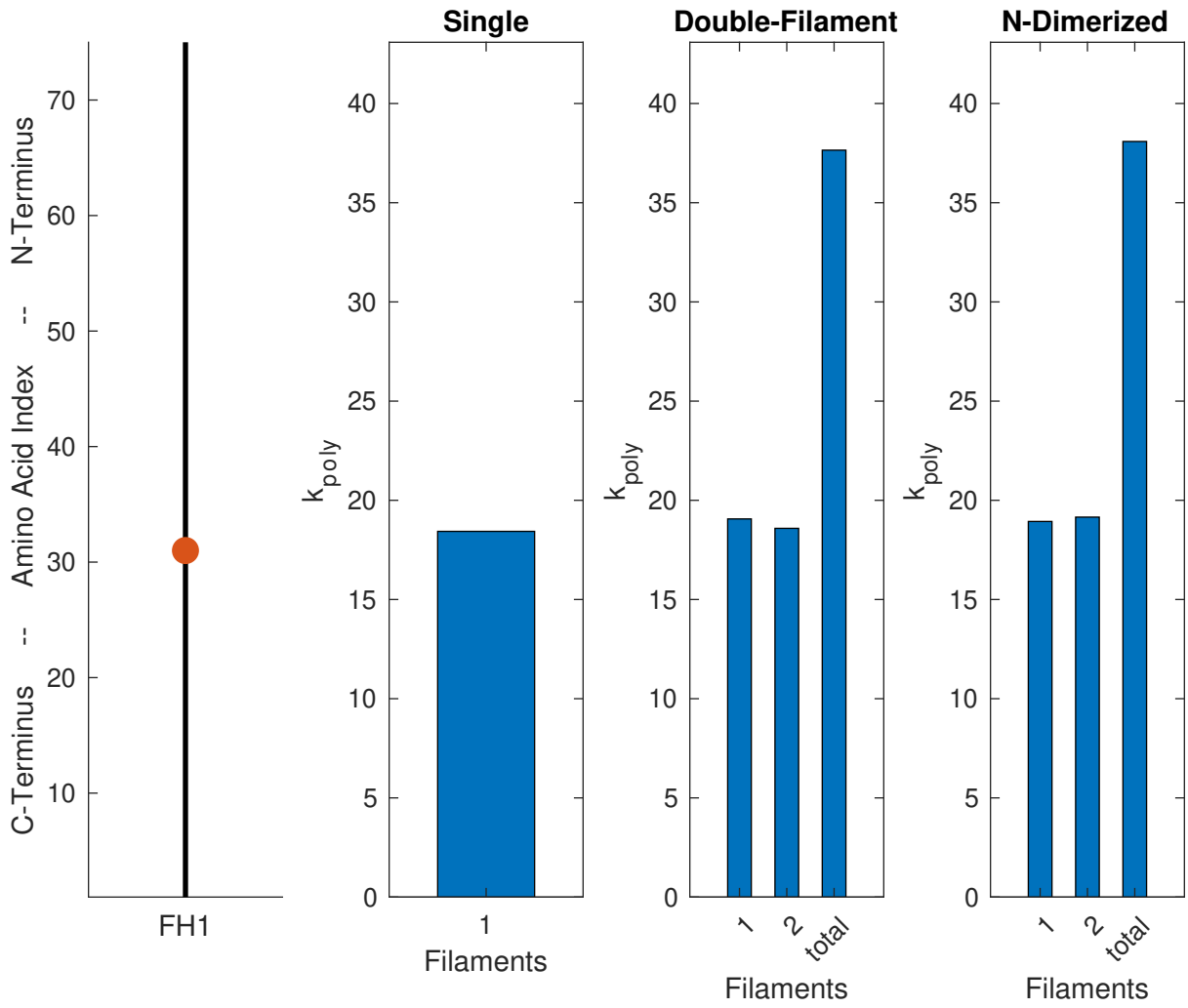

INF2--Mouse
C-Terminus -- Amino Acid Index -- N-Terminus
140
120
100
80
60
40
20
FH1
Single
Double-Filament
N-Dimerized
k_{poly}
100
90
80
70
60
50
40
30
20
10
0
1
Filaments
1
2
total
Filaments
1
2
total
Filaments

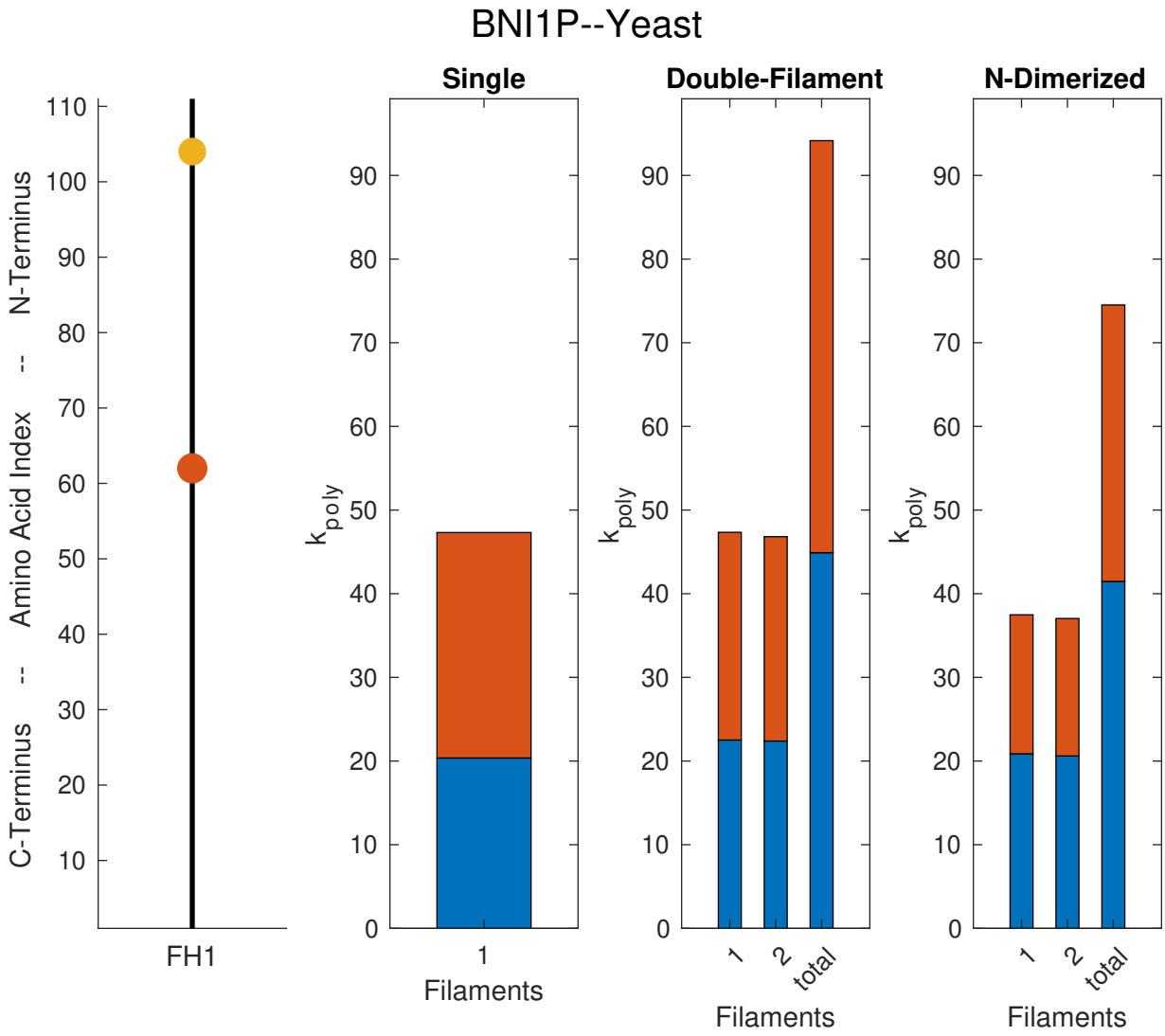

FHOD3--Human
C-Terminus -- Amino Acid Index -- N-Terminus
FH1
Single
Double-Filament
N-Dimerized
k poly
Filaments
1
2
total

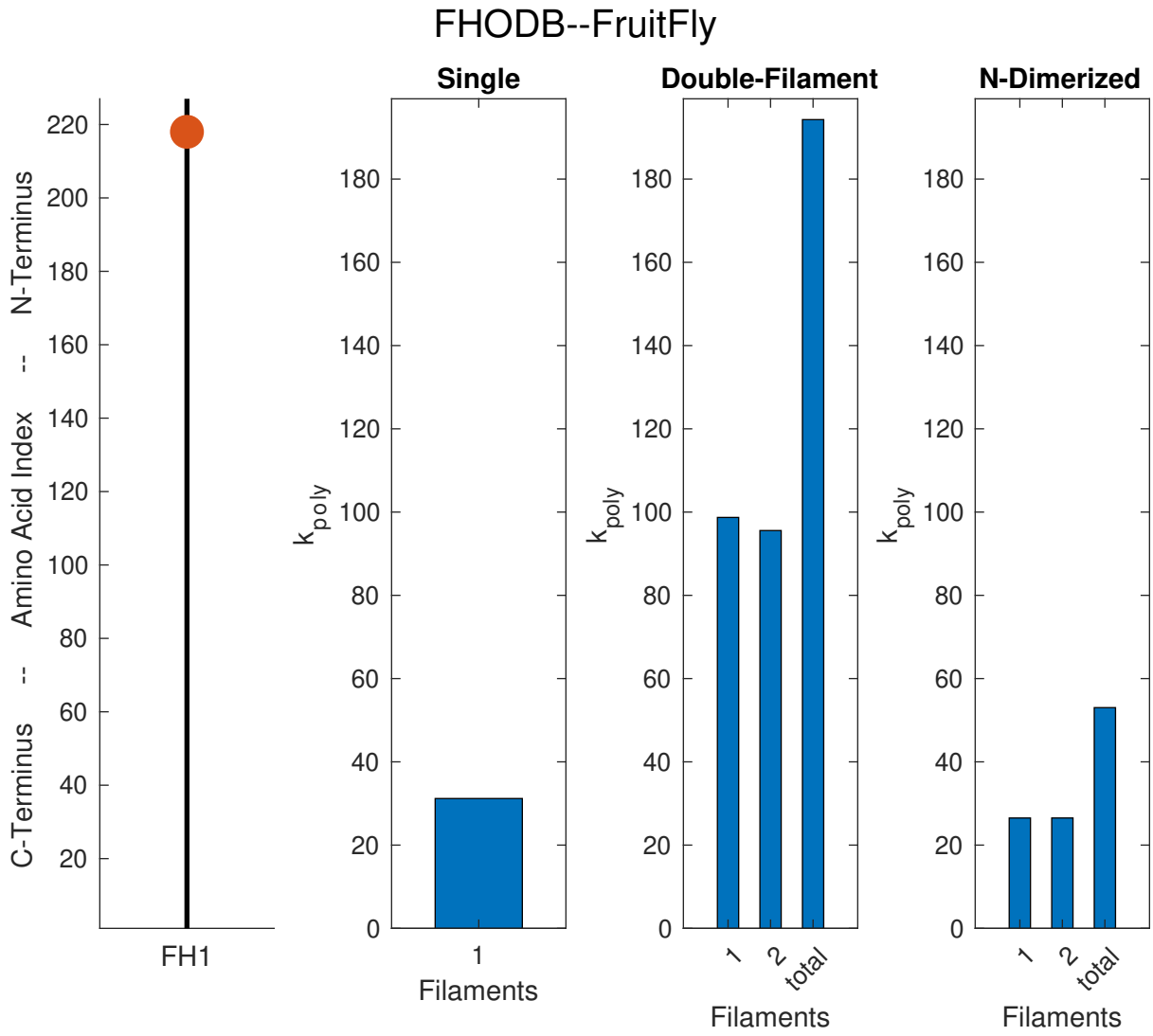

FHOD1--Mouse
C-Terminus -- Amino Acid Index -- N-Terminus
10
20
30
40
50
60
FH1
Single
Double-Filament
N-Dimerized
k_poly
0
20
40
60
80
100
120
1
Filaments
1
2
total
Filaments
Filaments

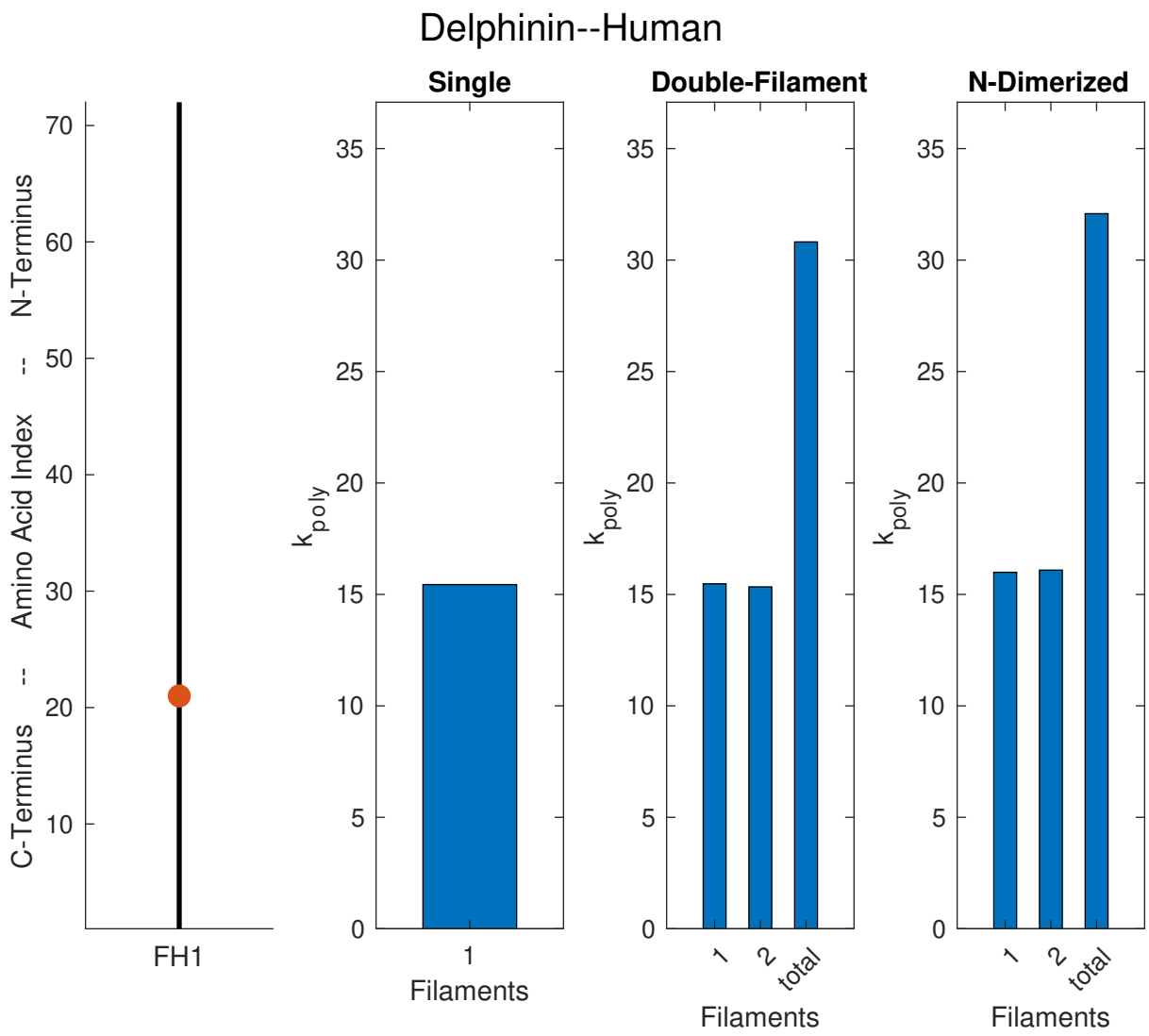

FHOD3--Mouse
C-Terminus -- Amino Acid Index -- N-Terminus
FH1
Single
Double-Filament
N-Dimerized
k poly
Filaments
1
2
total

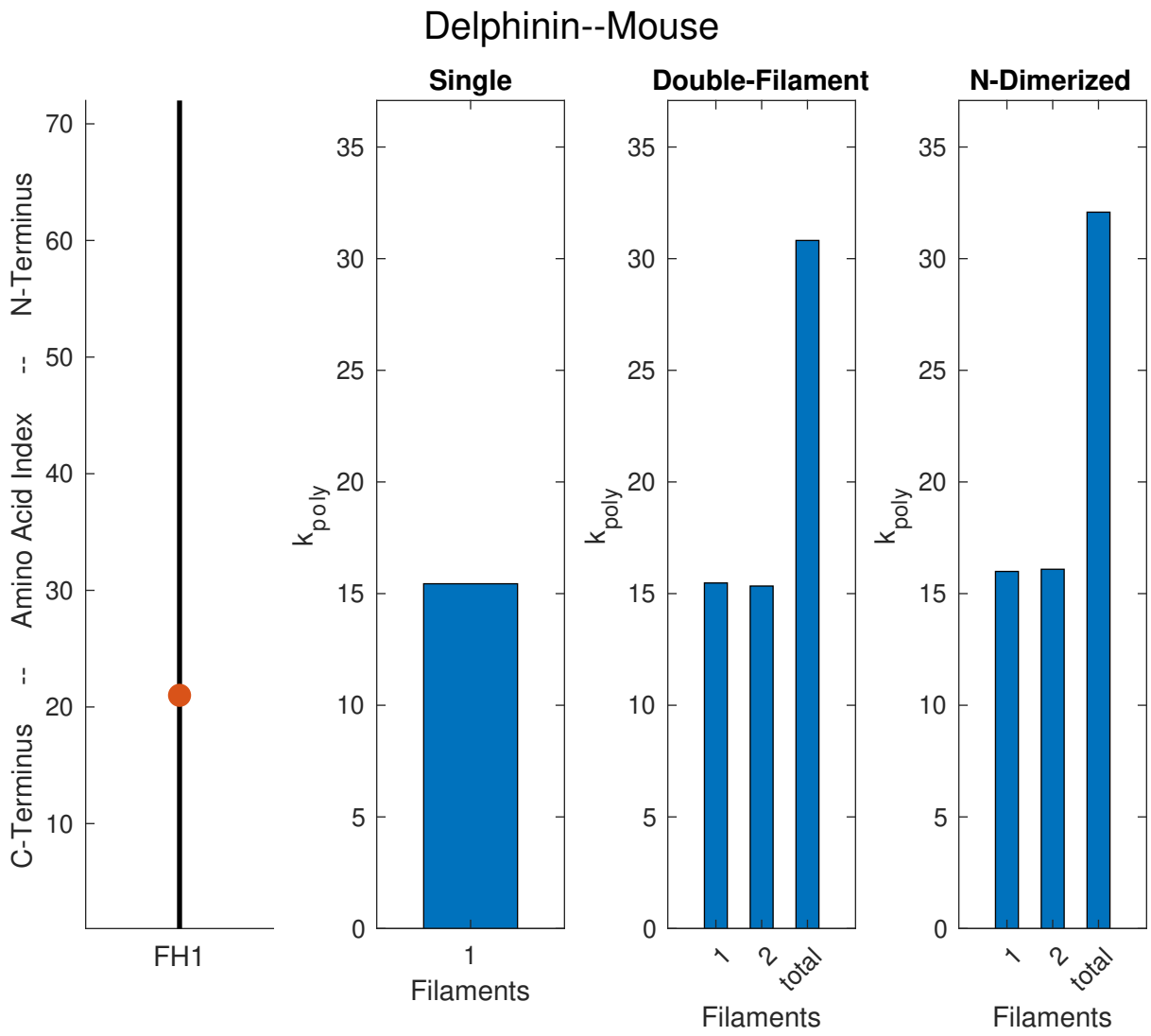

BNR1--Yeast
C-Terminus -- Amino Acid Index -- N-Terminus
FH1
Single
Double-Filament
N-Dimerized
k poly
Filaments
1
2
total

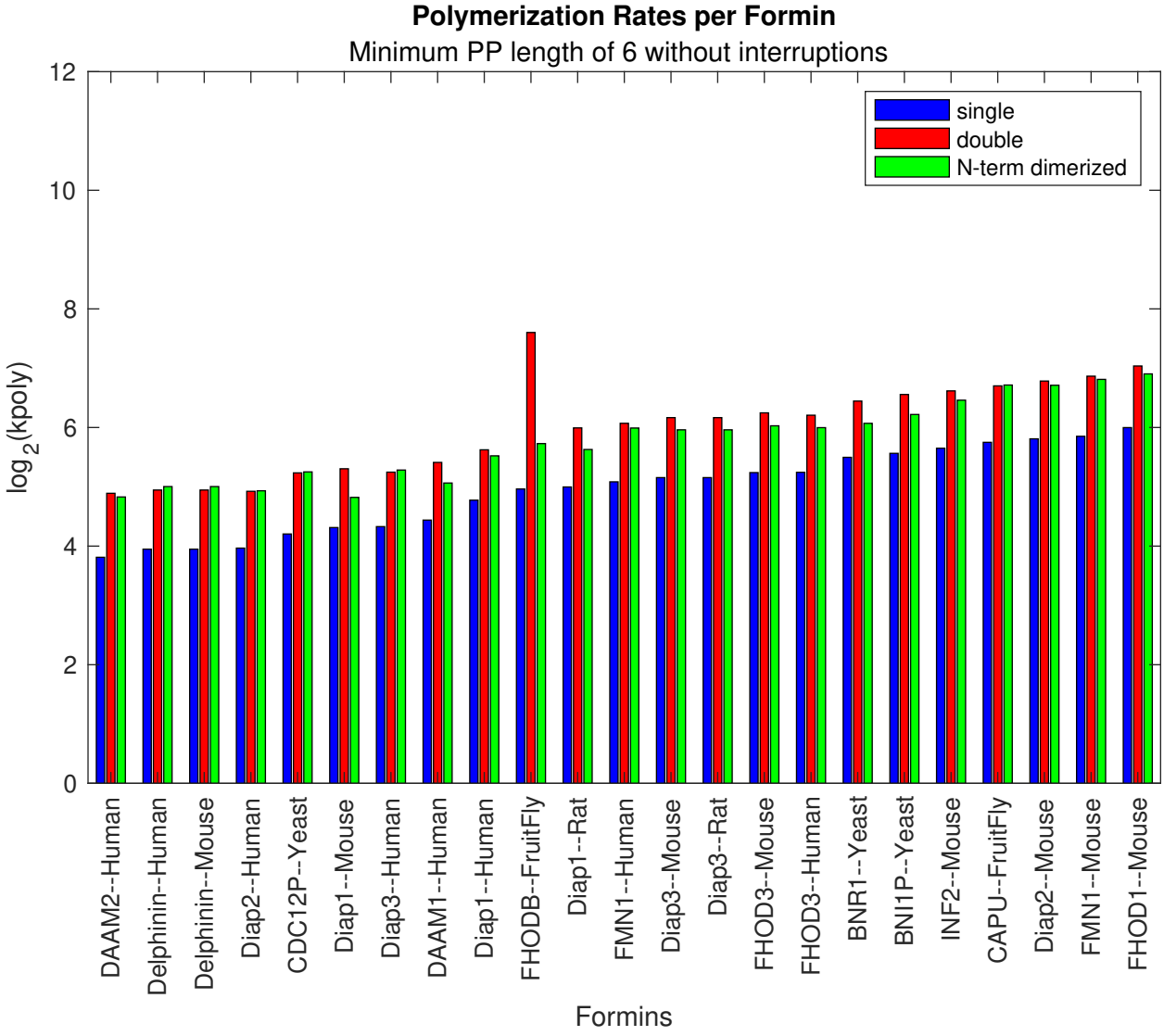

CDC12P--Yeast
Single
Double-Filament
N-Dimerized
C-Terminus -- Amino Acid Index -- N-Terminus
10
20
30
40
50
60
70
FH1
k_{poly}
0
5
10
15
20
25
30
35
40
1
Filaments
1
2
total
Filaments
Filaments

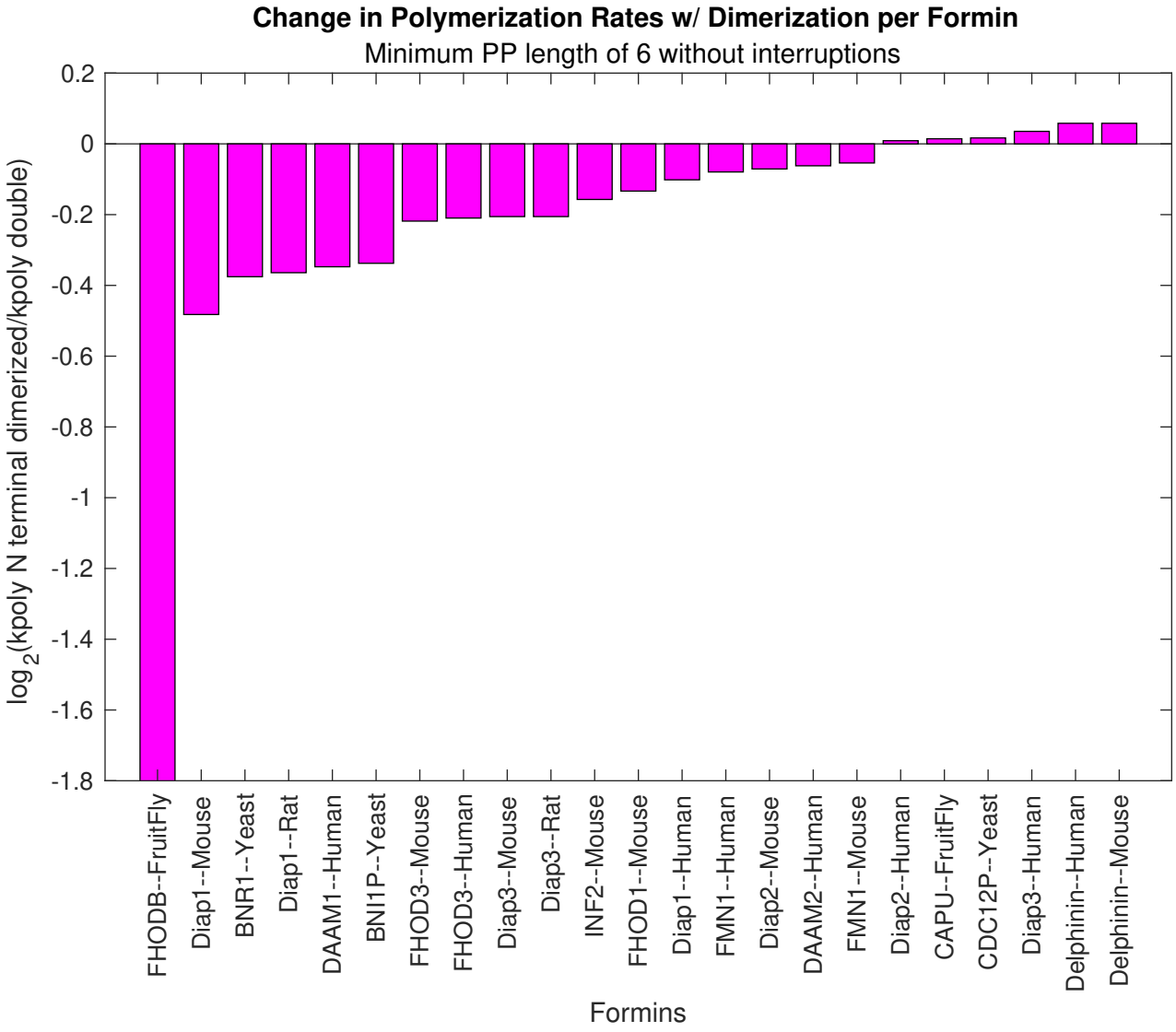

BNI1P--Yeast
C-Terminus -- Amino Acid Index -- N-Terminus
110
100
90
80
70
60
50
40
30
20
10
FH1
Single
Double-Filament
N-Dimerized
k poly
0
10
20
30
40
50
60
70
80
90
1
2
total
Filaments

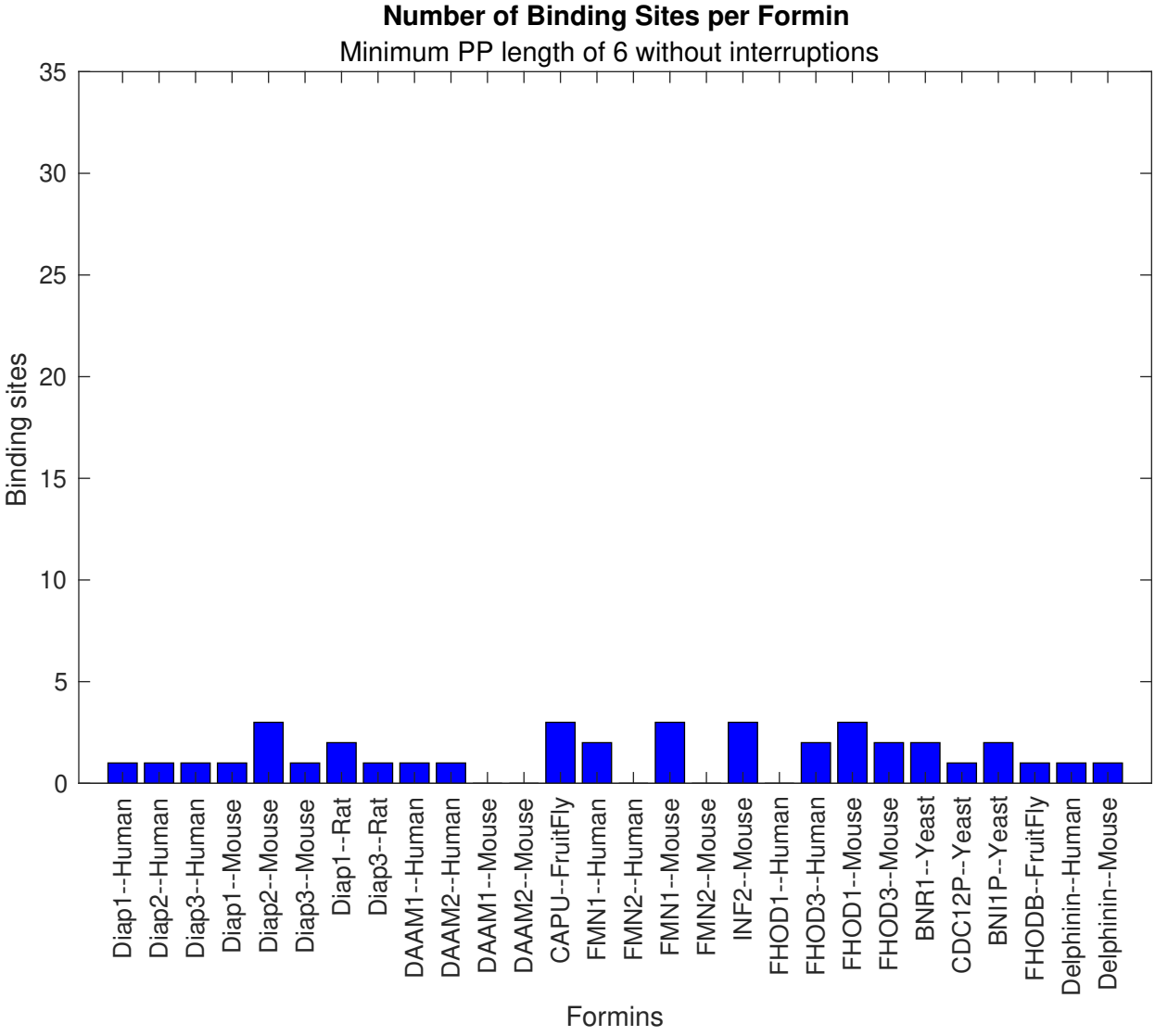

FHODB--FruitFly
C-Terminus -- Amino Acid Index -- N-Terminus
220
200
180
160
140
120
100
80
60
40
20
FH1
Single
Double-Filament
N-Dimerized
k poly
0
20
40
60
80
100
120
140
160
180
1
Filaments
1
2
total
Filaments
Filaments

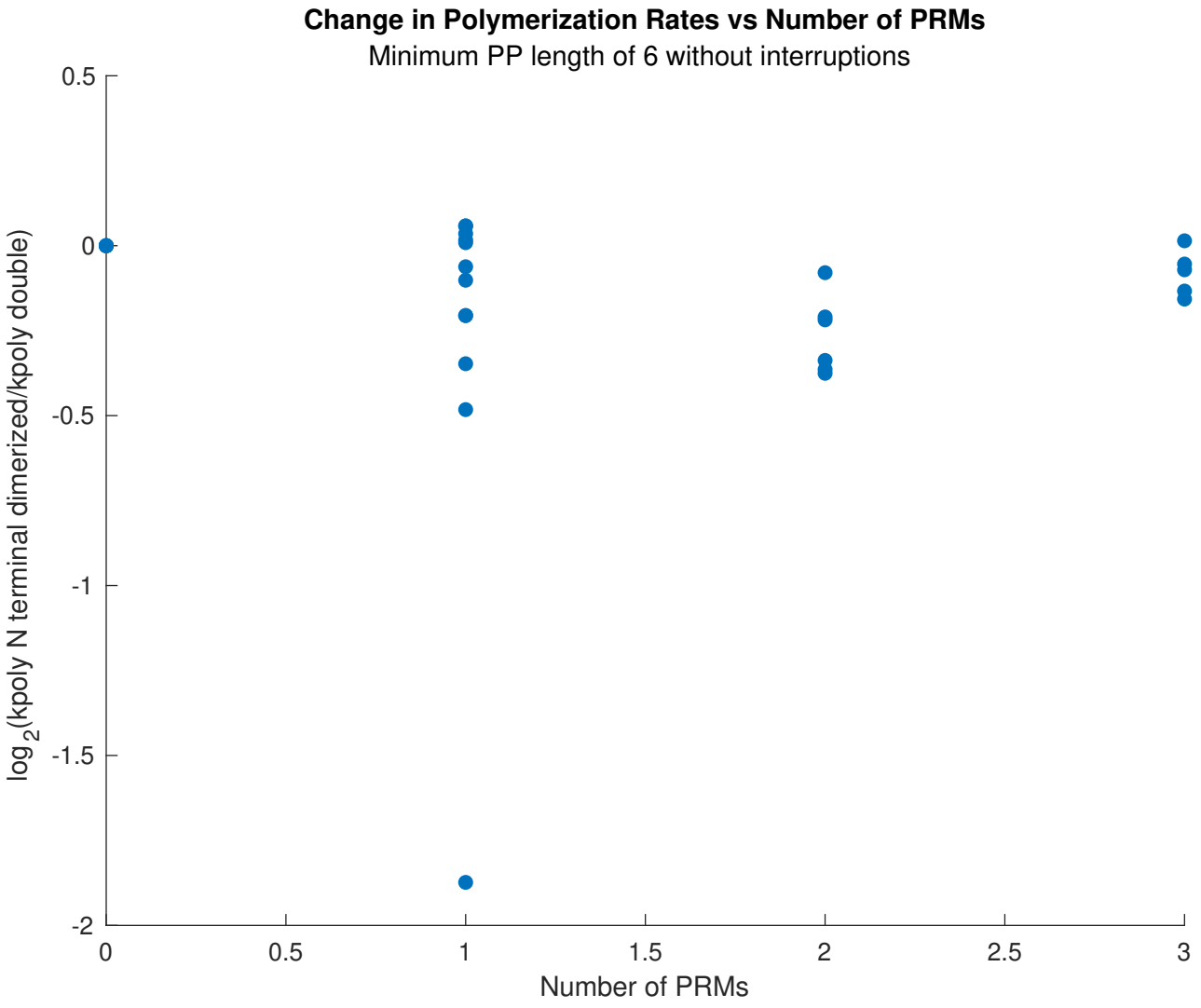

Delphinin--Human
C-Terminus -- Amino Acid Index -- N-Terminus
70
60
50
40
30
20
10
FH1
Single
Double-Filament
N-Dimerized
k poly
35
30
25
20
15
10
5
0
1
Filaments
1
2
total
Filaments
Filaments

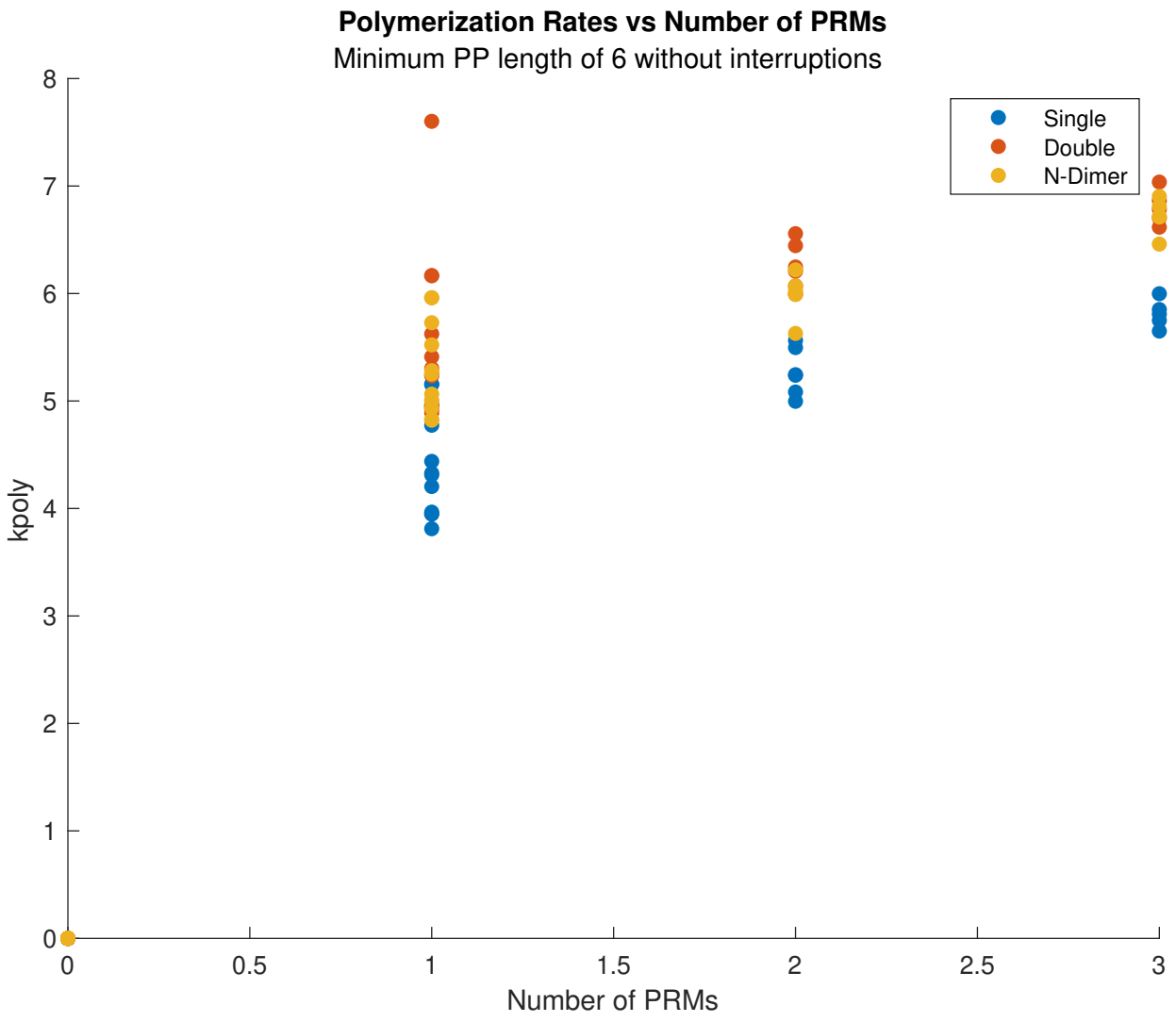

Delphinin--Mouse
C-Terminus -- Amino Acid Index -- N-Terminus
70
60
50
40
30
20
10
FH1
Single
Double-Filament
N-Dimerized
k poly
35
30
25
20
15
10
5
0
1
Filaments
1
2
total
Filaments
Filaments

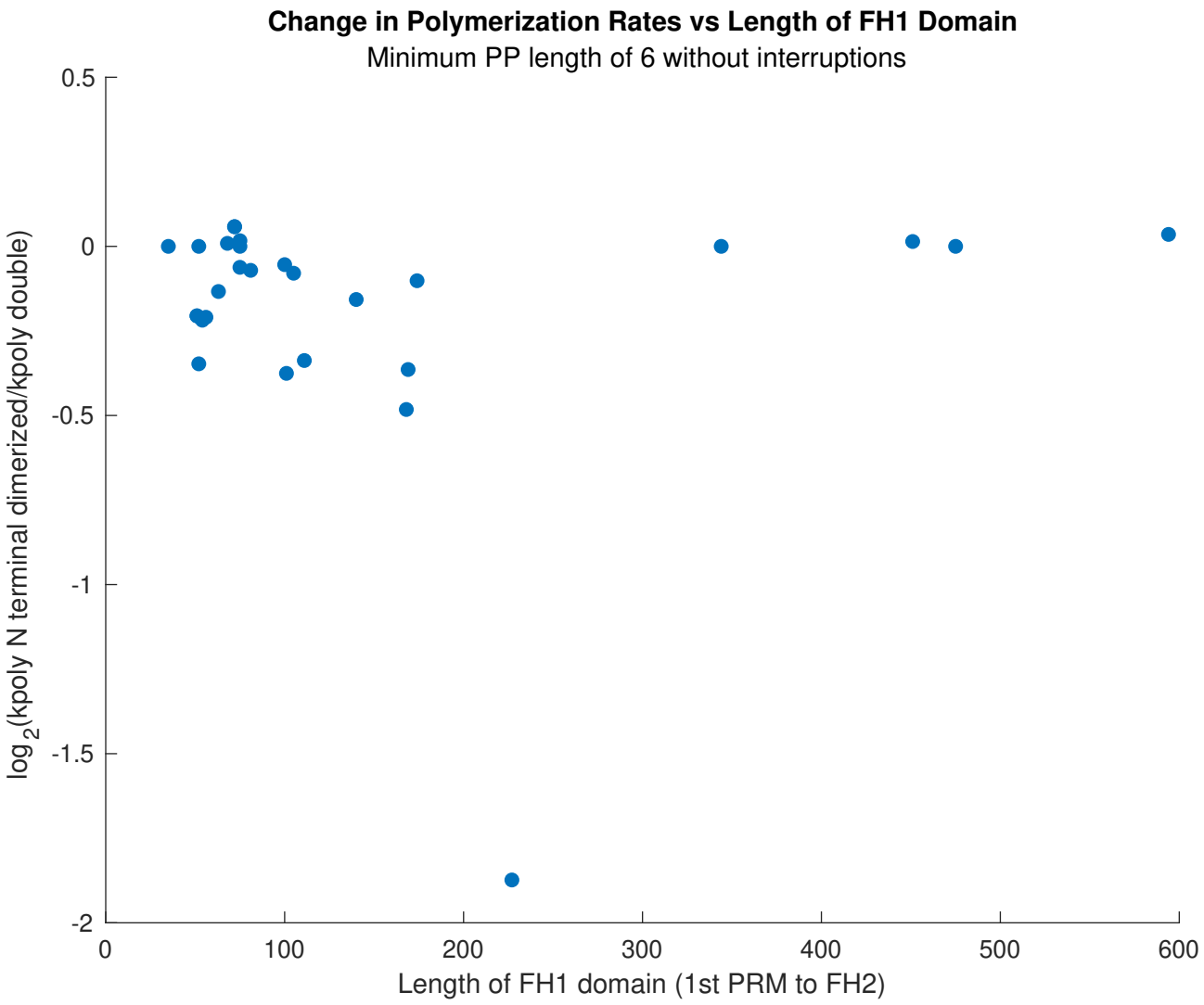

Polymerization Rates per Formin
Minimum PP length of 6 without interruptions
single
double
N-term dimerized
log2(kpoly)
0
2
4
6
8
10
12
DAAM2--Human
Delphinin--Human
Delphinin--Mouse
Diap2--Human
CDC12P--Yeast
Diap1--Mouse
Diap3--Human
DAAM1--Human
Diap1--Human
FHODB--FruitFly
Diap1--Rat
FMN1--Human
Diap3--Mouse
Diap3--Rat
FHOD3--Mouse
FHOD3--Human
BNR1--Yeast
BNI1P--Yeast
INF2--Mouse
CAPU--FruitFly
Diap2--Mouse
FMN1--Mouse
FHOD1--Mouse
Formins

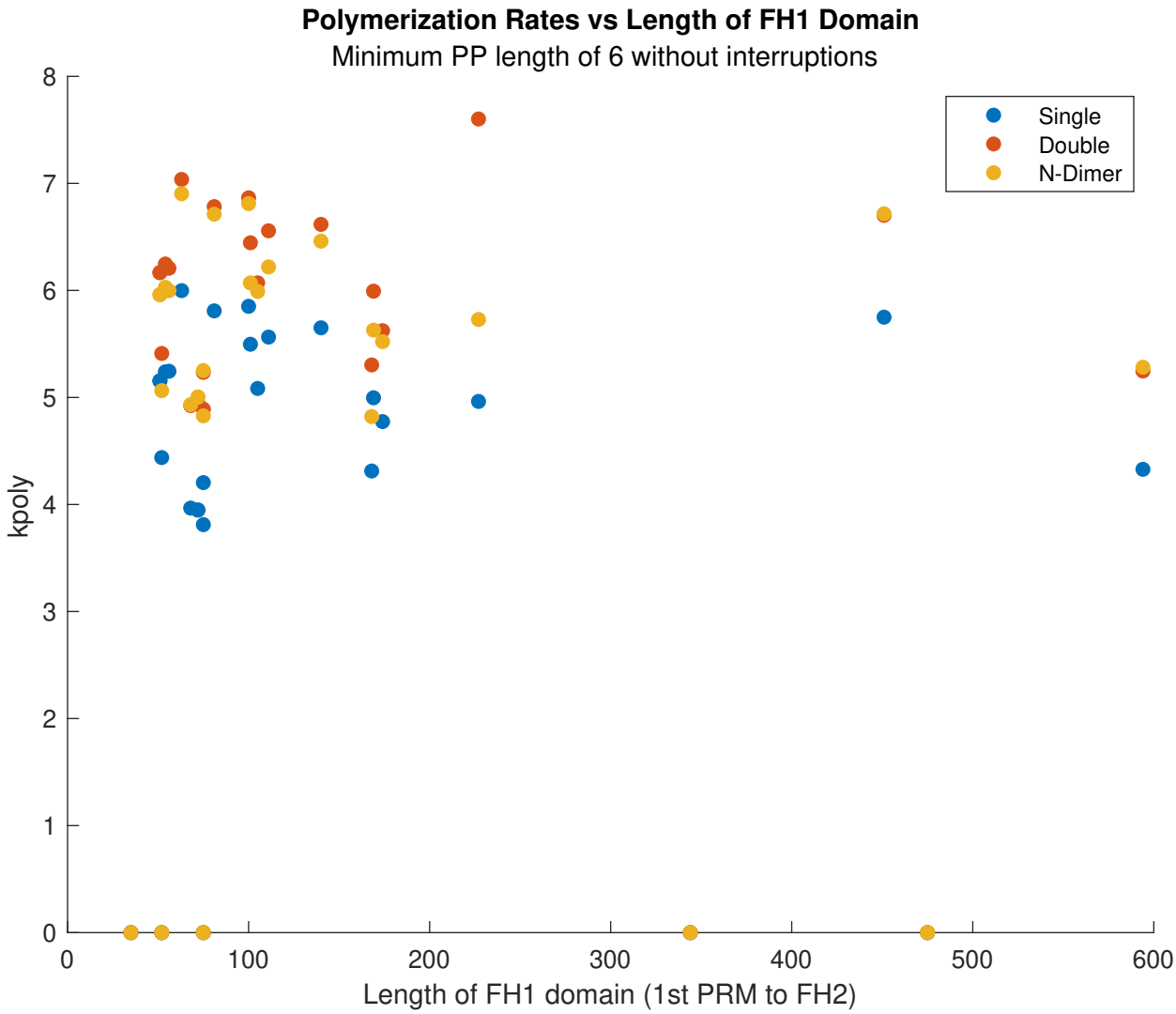

Change in Polymerization Rates w/ Dimerization per Formin
Minimum PP length of 6 without interruptions
log2(kpoly N terminal dimerized/kpoly double)
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
-1.2
-1.4
-1.6
-1.8
FHODB--FruitFly
Diap1--Mouse
BNR1--Yeast
Diap1--Rat
DAAM1--Human
BNI1P--Yeast
FHOD3--Mouse
FHOD3--Human
Diap3--Mouse
Diap3--Rat
INF2--Mouse
FHOD1--Mouse
Diap1--Human
FMN1--Human
Diap2--Mouse
DAAM2--Human
FMN1--Mouse
Diap2--Human
CAPU--FruitFly
CDC12P--Yeast
Diap3--Human
Delphinin--Human
Delphinin--Mouse
Formins

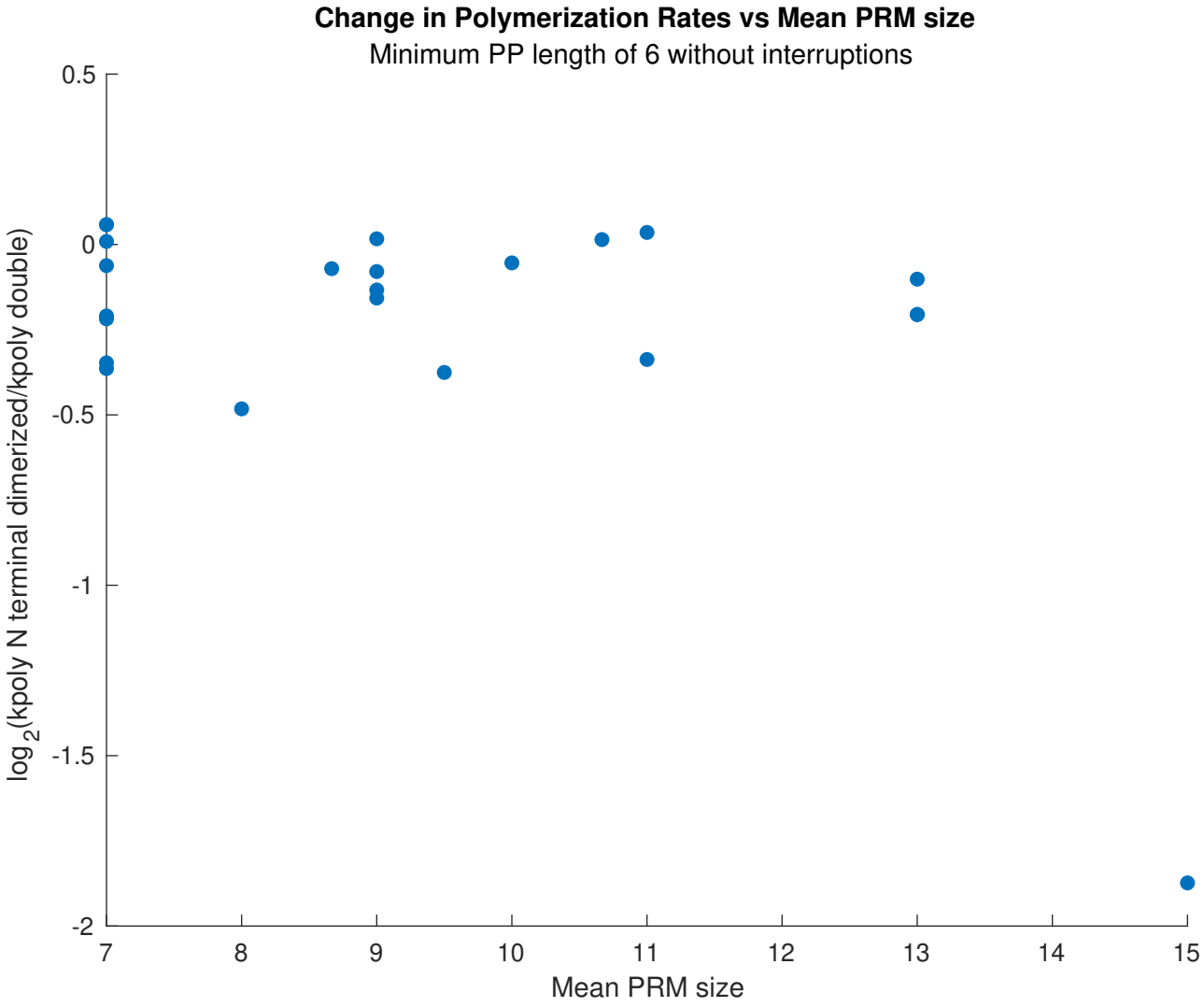

Number of Binding Sites per Formin
Minimum PP length of 6 without interruptions
Binding sites
0
5
10
15
20
25
30
35
Diap1--Human
Diap2--Human
Diap3--Human
Diap1--Mouse
Diap2--Mouse
Diap3--Mouse
Diap1--Rat
Diap3--Rat
DAAM1--Human
DAAM2--Human
DAAM1--Mouse
DAAM2--Mouse
CAPU--FruitFly
FMN1--Human
FMN2--Human
FMN1--Mouse
FMN2--Mouse
INF2--Mouse
FHOD1--Human
FHOD3--Human
FHOD1--Mouse
FHOD3--Mouse
BNR1--Yeast
CDC12P--Yeast
BNI1P--Yeast
FHODB--FruitFly
Delphinin--Human
Delphinin--Mouse
Formins

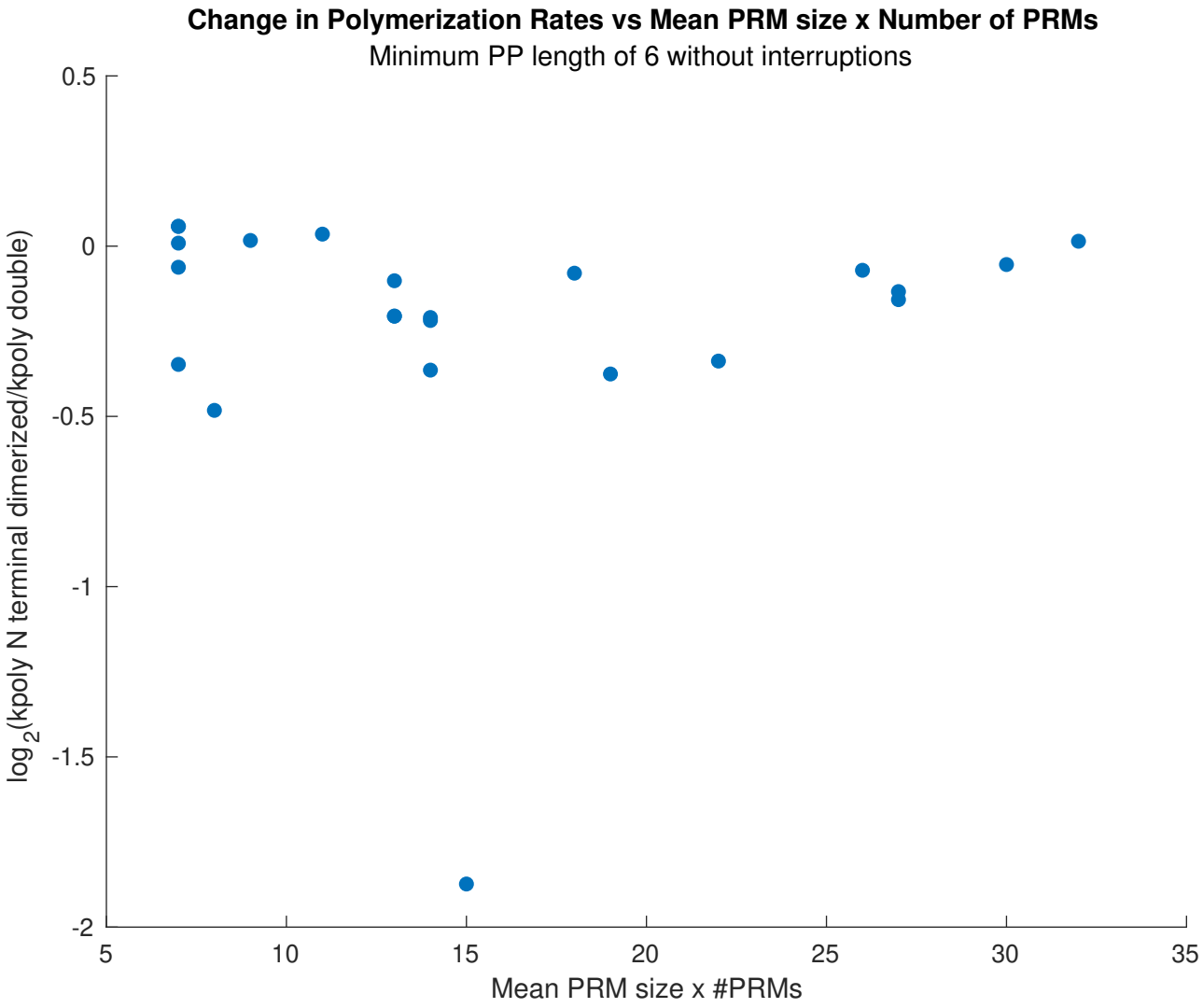

Change in Polymerization Rates vs Number of PRMs
Minimum PP length of 6 without interruptions
log2(kpoly N terminal dimerized/kpoly double)
0.5
0
-0.5
-1
-1.5
-2
0
0.5
1
1.5
2
2.5
3
Number of PRMs


Polymerization Rates vs Number of PRMs
Minimum PP length of 6 without interruptions
Single
Double
N-Dimer
kpoly
Number of PRMs
0
1
2
3
4
5
6
7
8
0
0.5
1
1.5
2
2.5
3


Change in Polymerization Rates vs Length of FH1 Domain
Minimum PP length of 6 without interruptions
0.5
0
-0.5
-1
-1.5
-2
log2(kpoly N terminal dimerized/kpoly double)
0
100
200
300
400
500
600
Length of FH1 domain (1st PRM to FH2)


Polymerization Rates vs Length of FH1 Domain
Minimum PP length of 6 without interruptions
Single
Double
N-Dimer
kpoly
Length of FH1 domain (1st PRM to FH2)
0
1
2
3
4
5
6
7
8
0
100
200
300
400
500
600


Change in Polymerization Rates vs Mean PRM size
Minimum PP length of 6 without interruptions
log2(kpoly N terminal dimerized/kpoly double)
0.5
0
-0.5
-1
-1.5
-2
7
8
9
10
11
12
13
14
15
Mean PRM size


Change in Polymerization Rates vs Mean PRM size x Number of PRMs
Minimum PP length of 6 without interruptions
log2(kpoly N terminal dimerized/kpoly double)
0.5
0
-0.5
-1
-1.5
-2
5
10
15
20
25
30
35
Mean PRM size x #PRMs