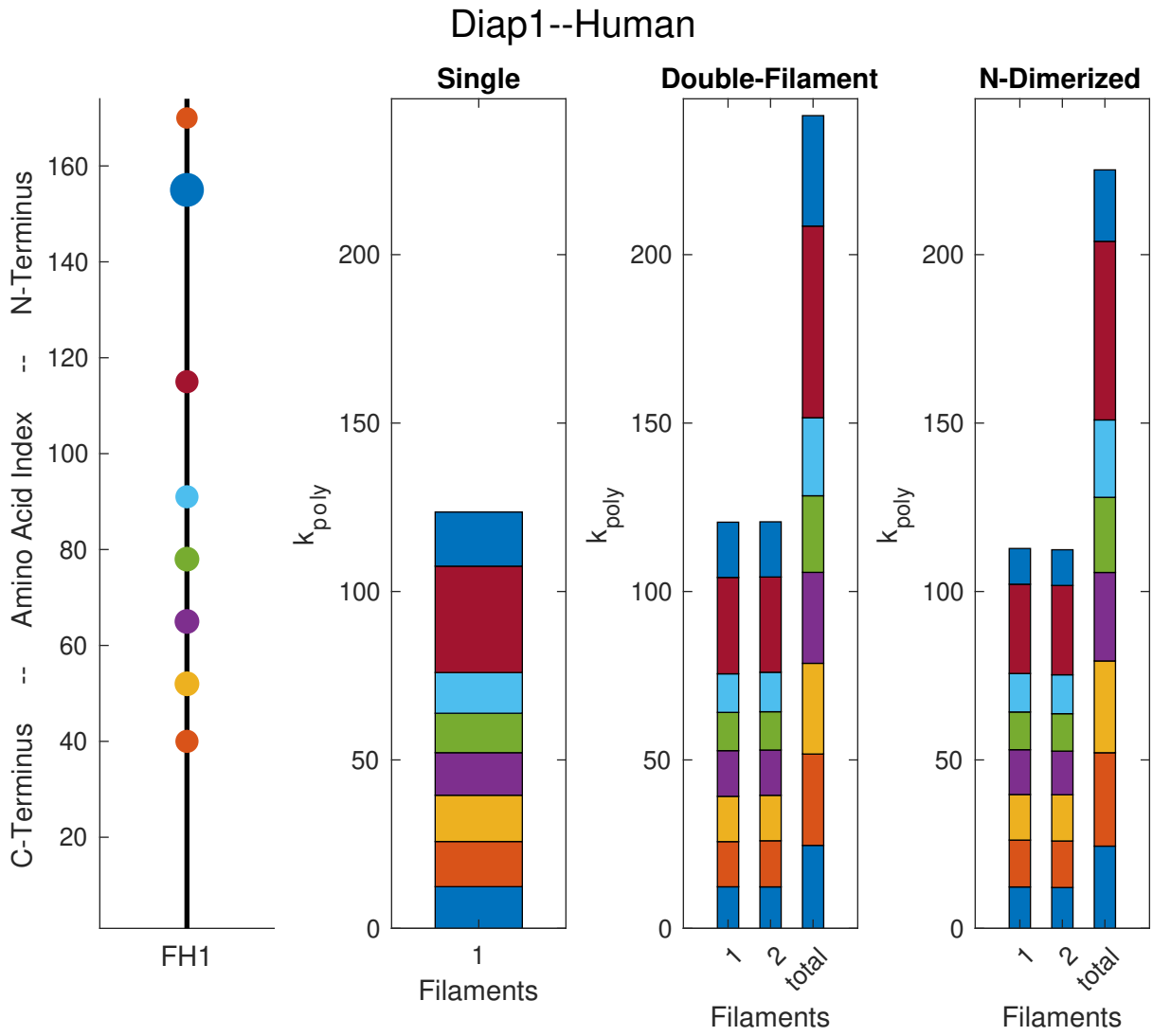
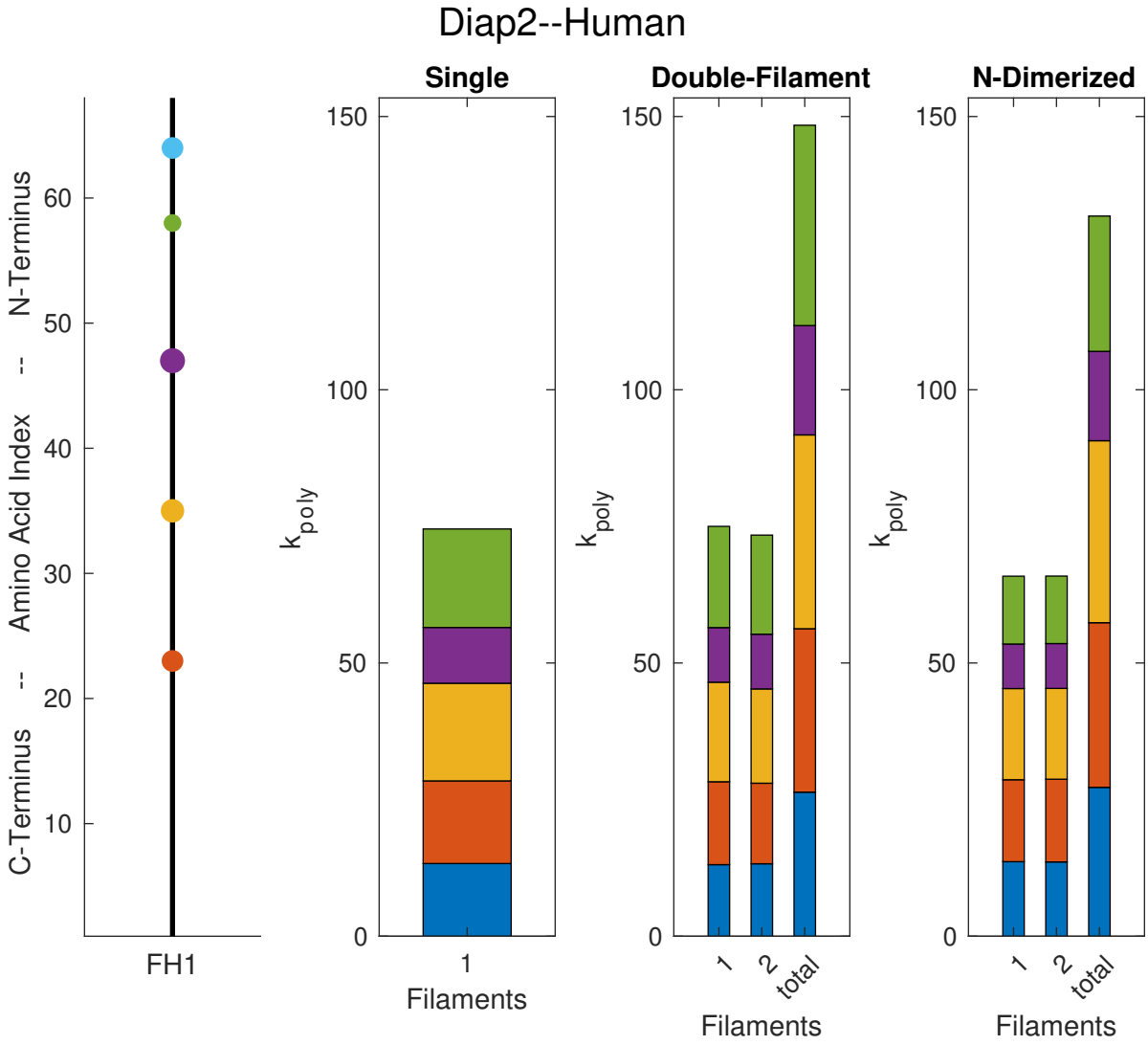
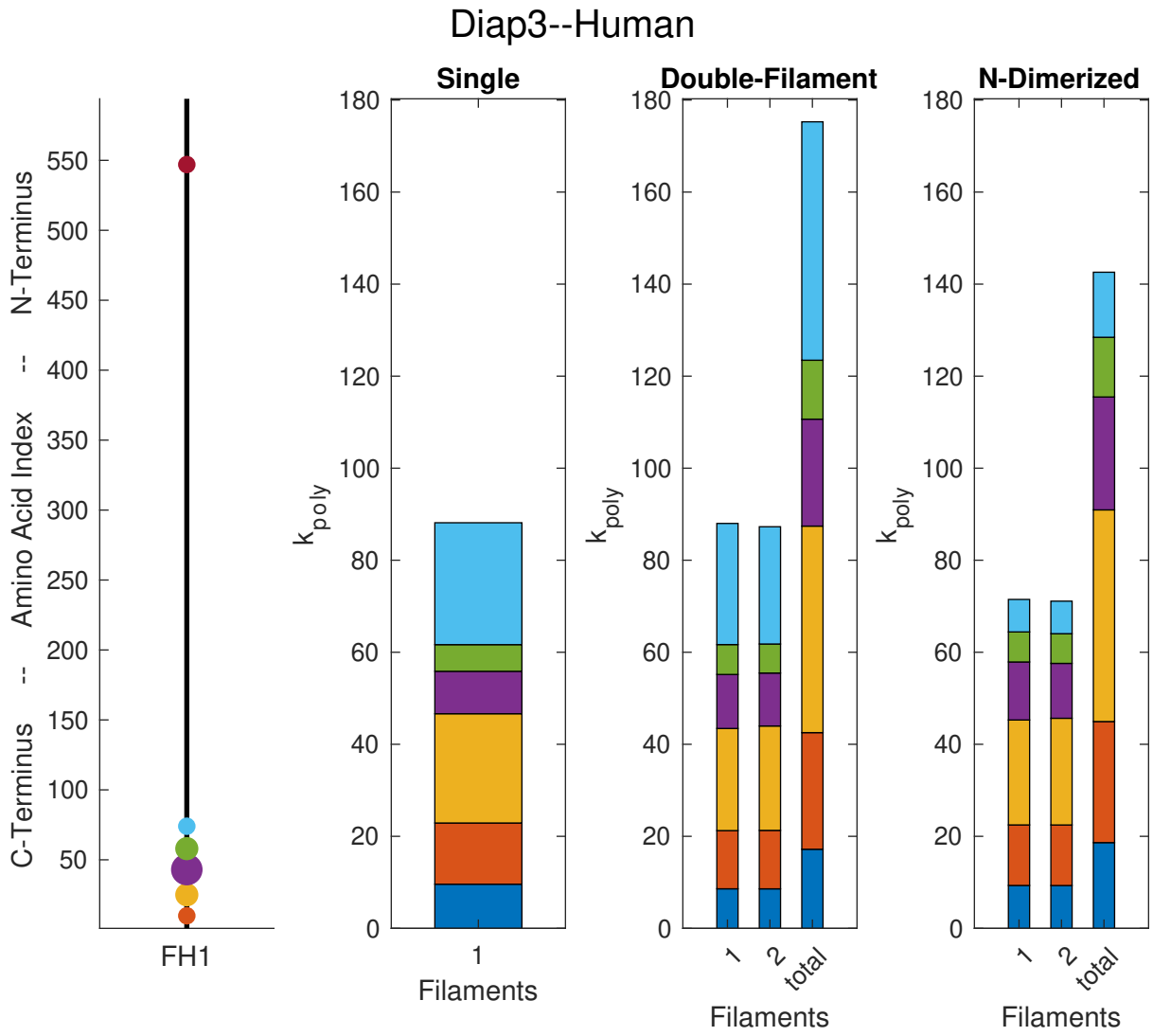
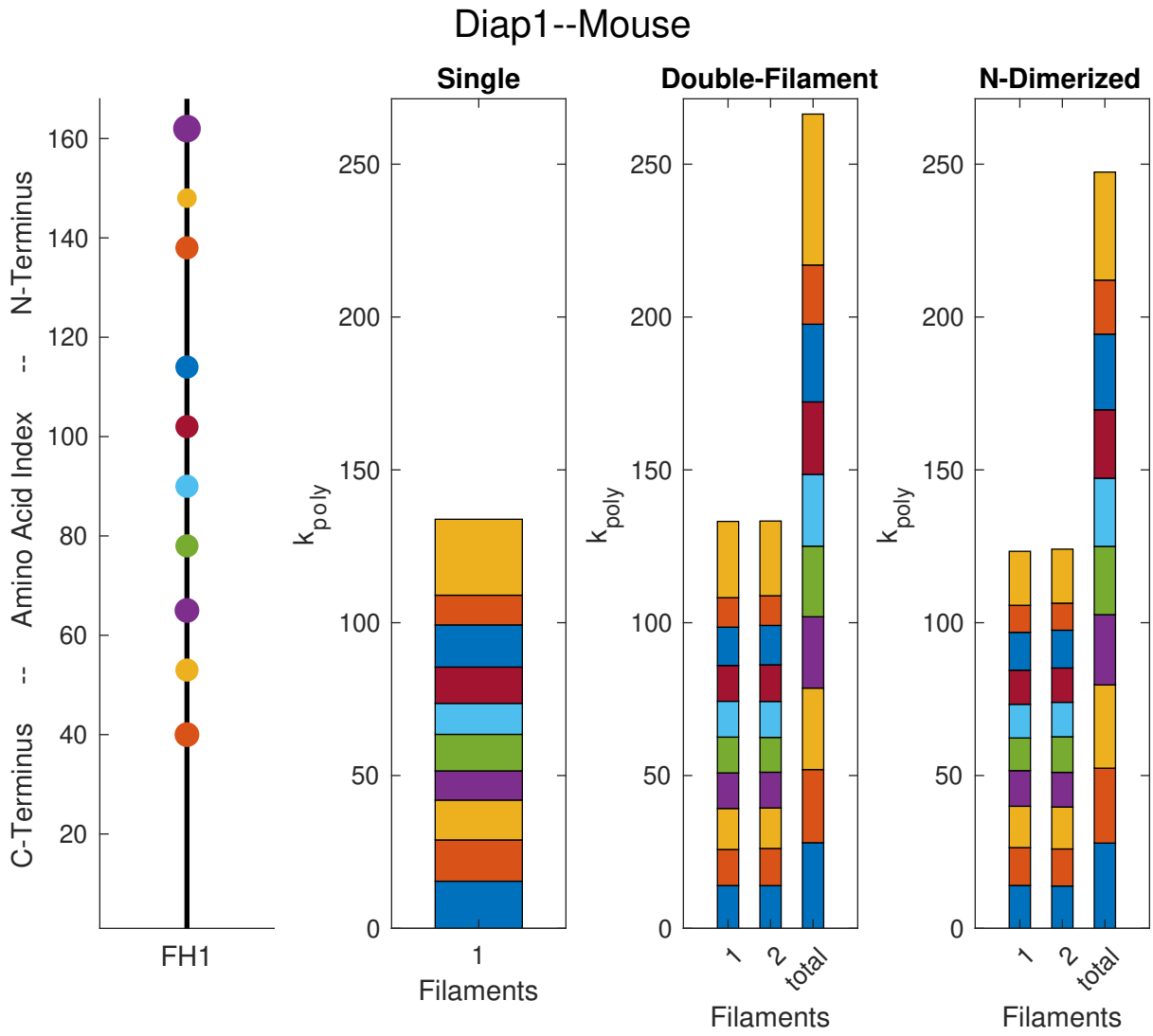
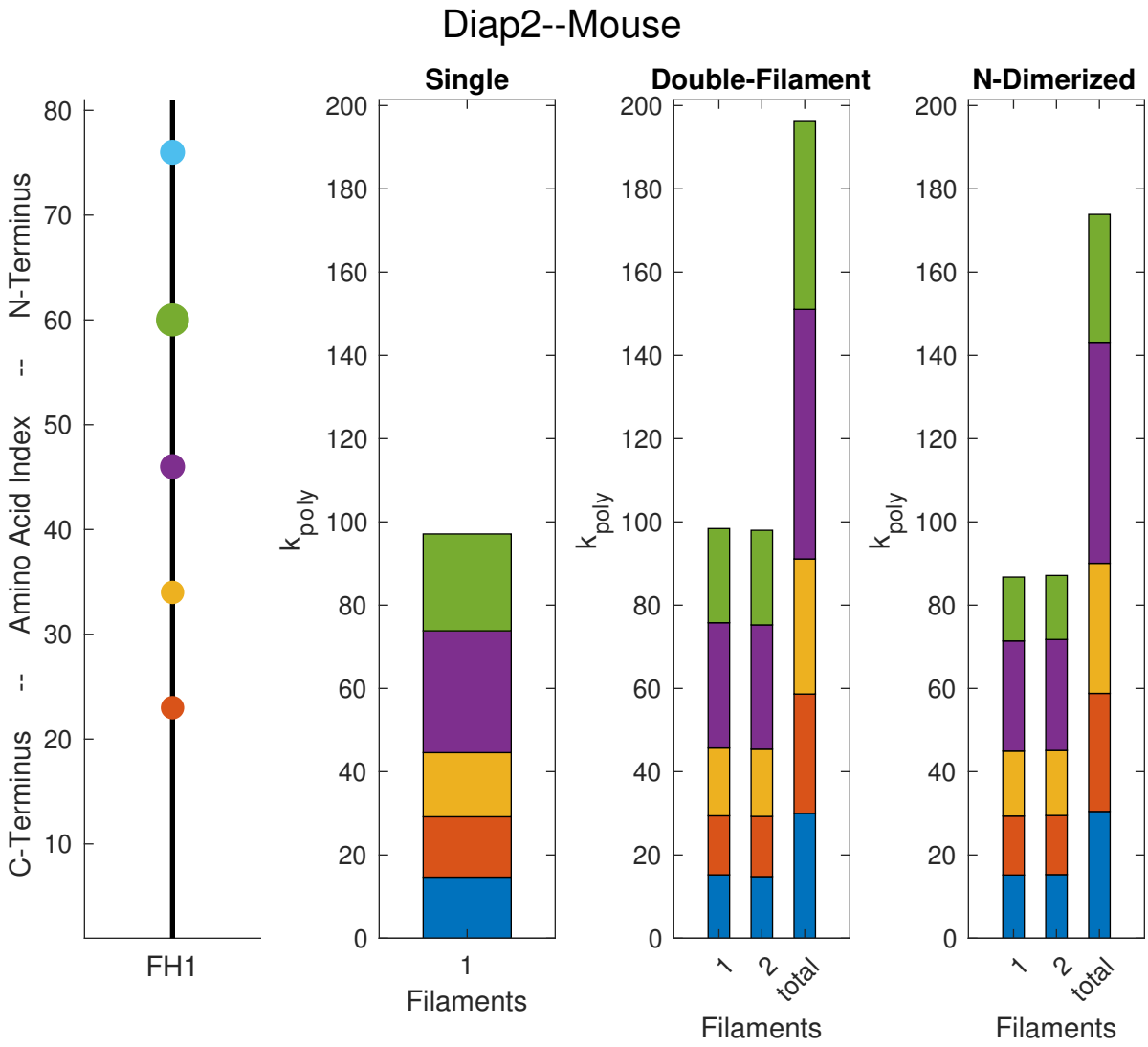
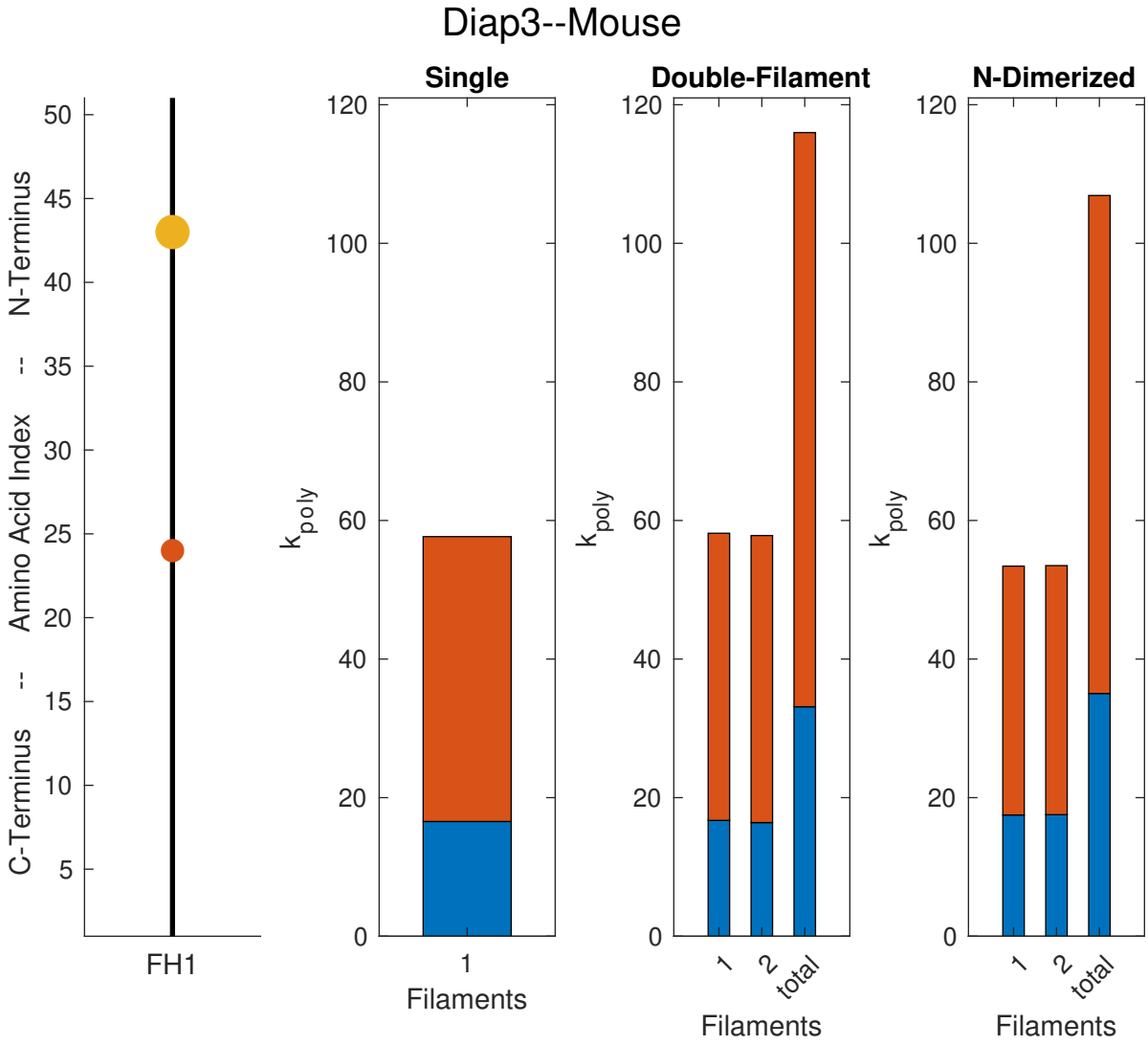

Diap1--Human
Single
Double-Filament
N-Dimerized
C-Terminus -- Amino Acid Index -- N-Terminus
20
40
60
80
100
120
140
160
FH1
$k_{poly}$
0
50
100
150
200
1
Filaments
1
2
total
Filaments
Filaments

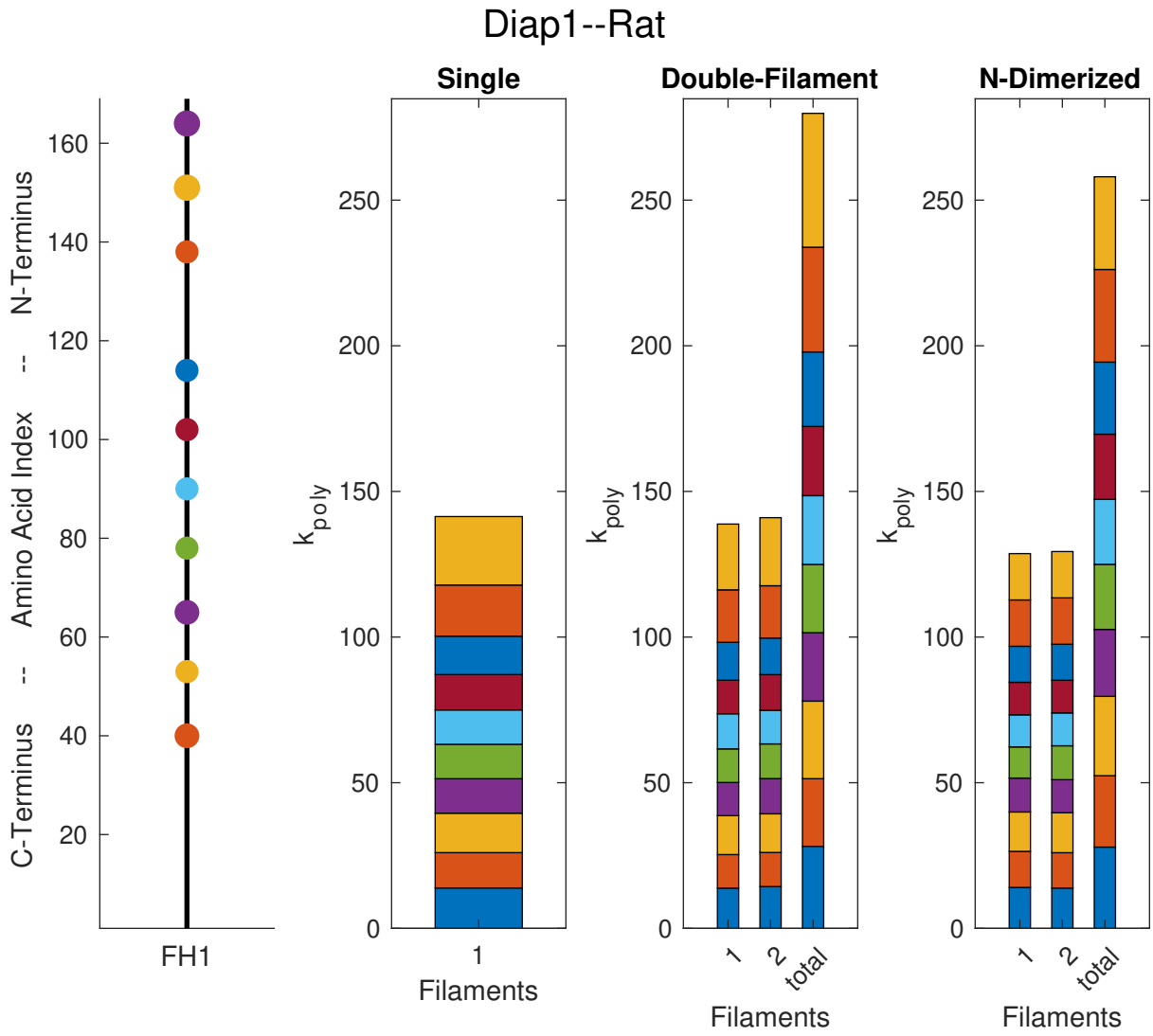

Diap2--Human
Single
Double-Filament
N-Dimerized
C-Terminus -- Amino Acid Index -- N-Terminus
10
20
30
40
50
60
FH1
$k_{poly}$
0
50
100
150
1
Filaments
1
2
total
Filaments
Filaments

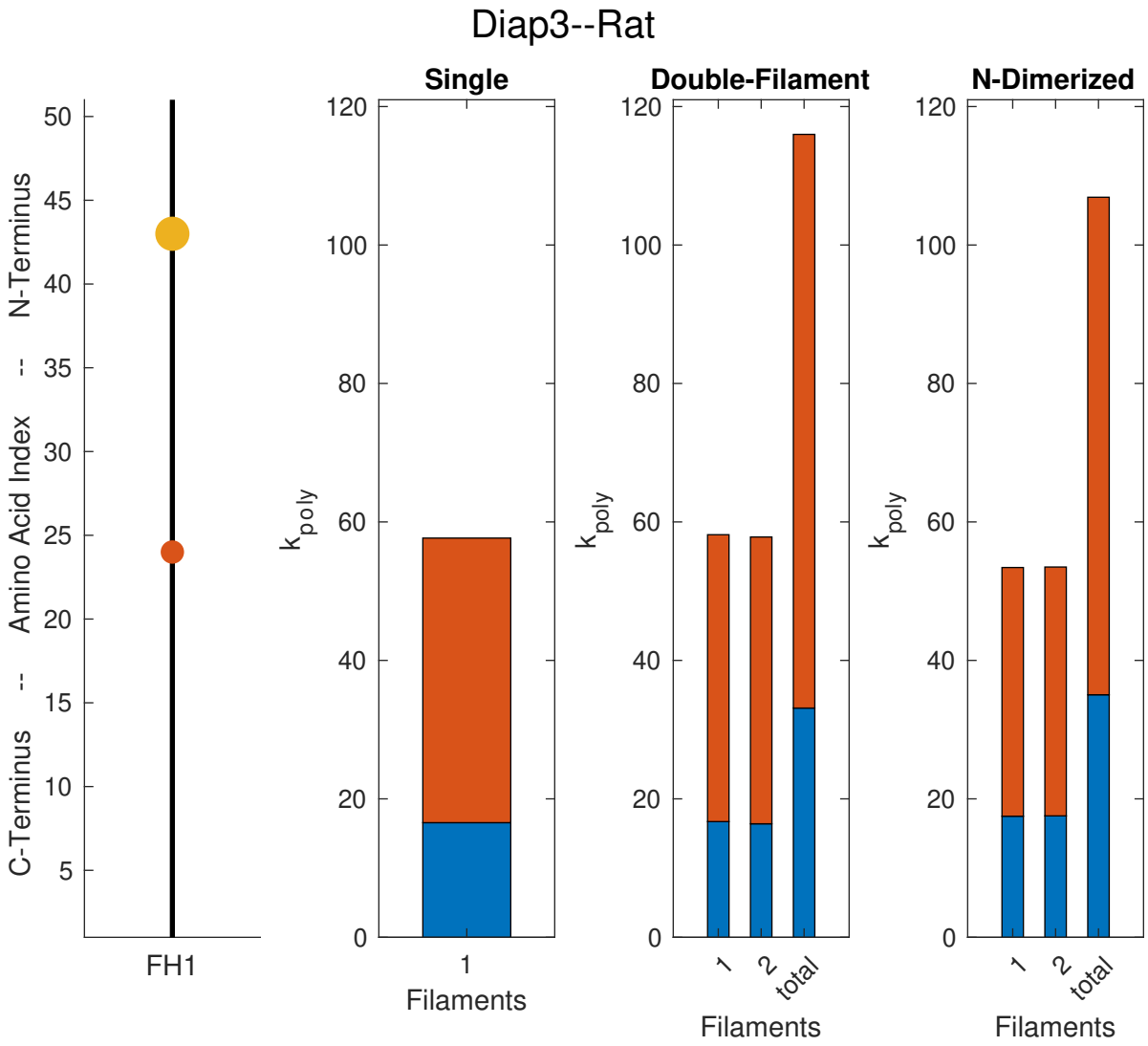

Diap3--Human
C-Terminus -- Amino Acid Index -- N-Terminus
550
500
450
400
350
300
250
200
150
100
50
FH1
Single
Double-Filament
N-Dimerized
$k_{poly}$
180
160
140
120
100
80
60
40
20
0
1
2
total
Filaments

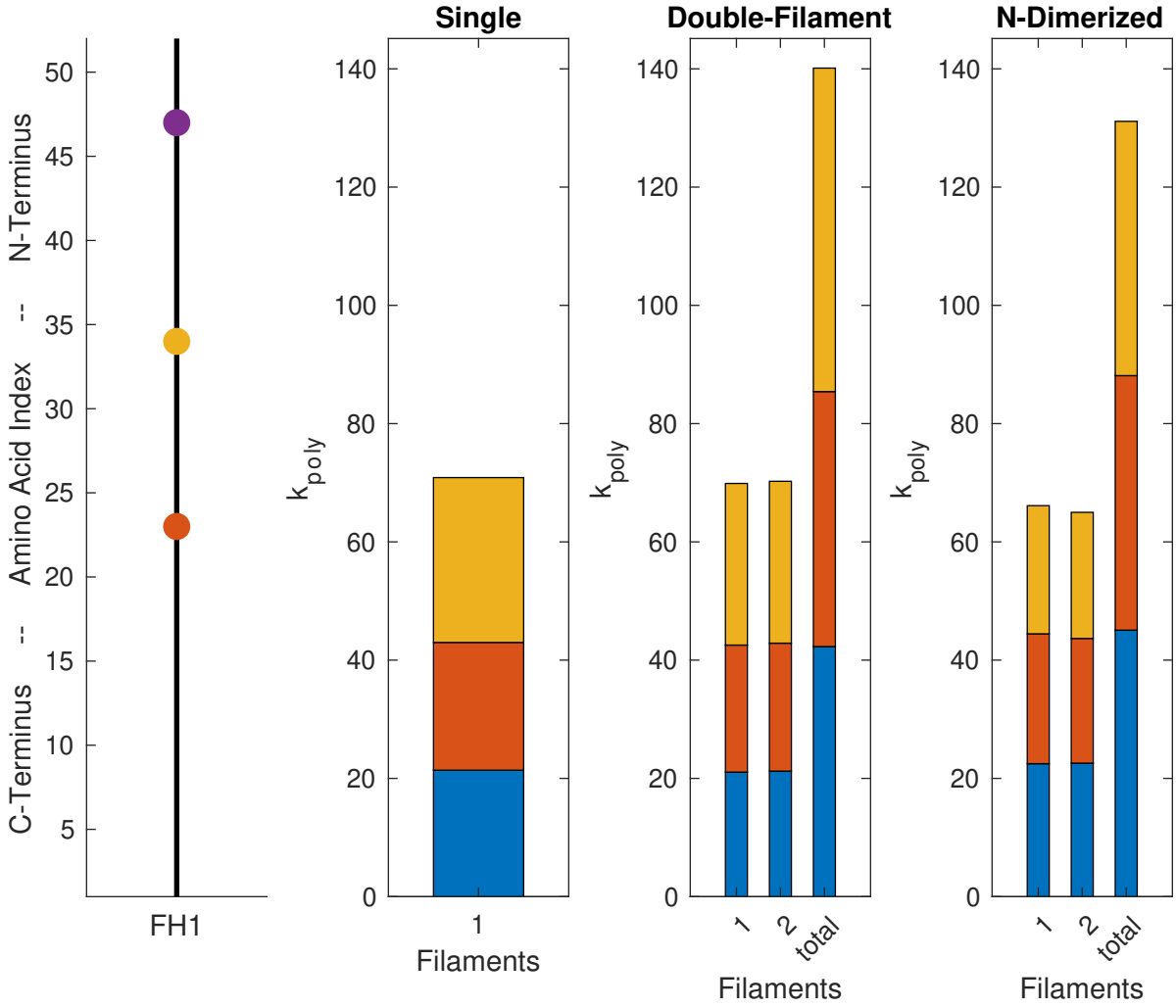

Diap1--Mouse
C-Terminus -- Amino Acid Index -- N-Terminus
20
40
60
80
100
120
140
160
FH1
Single
Double-Filament
N-Dimerized
k poly
0
50
100
150
200
250
1
Filaments
1
2
total
Filaments
Filaments

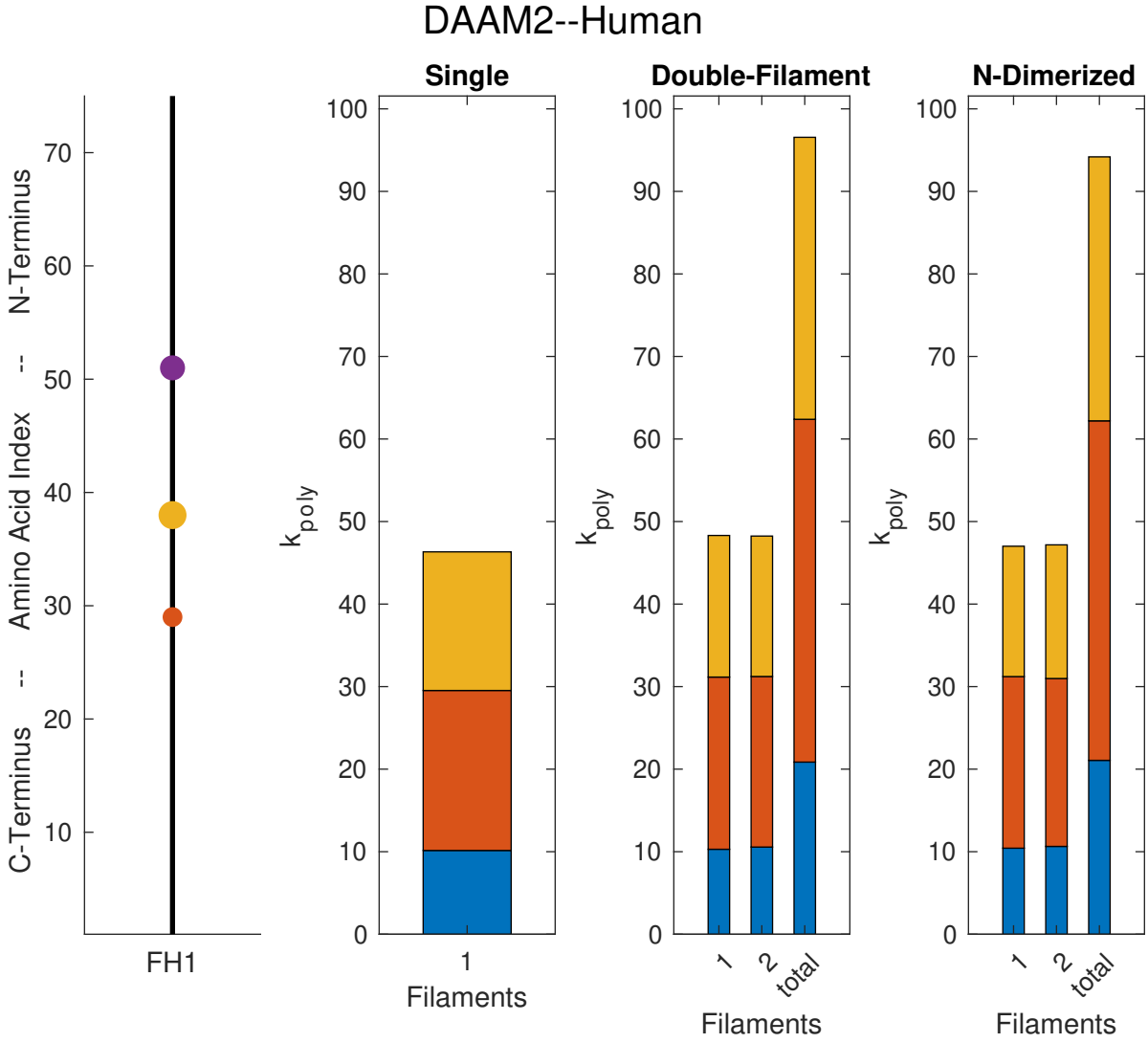

Diap2--Mouse
Single
Double-Filament
N-Dimerized
C-Terminus -- Amino Acid Index -- N-Terminus
FH1
k poly
Filaments
1
2
total

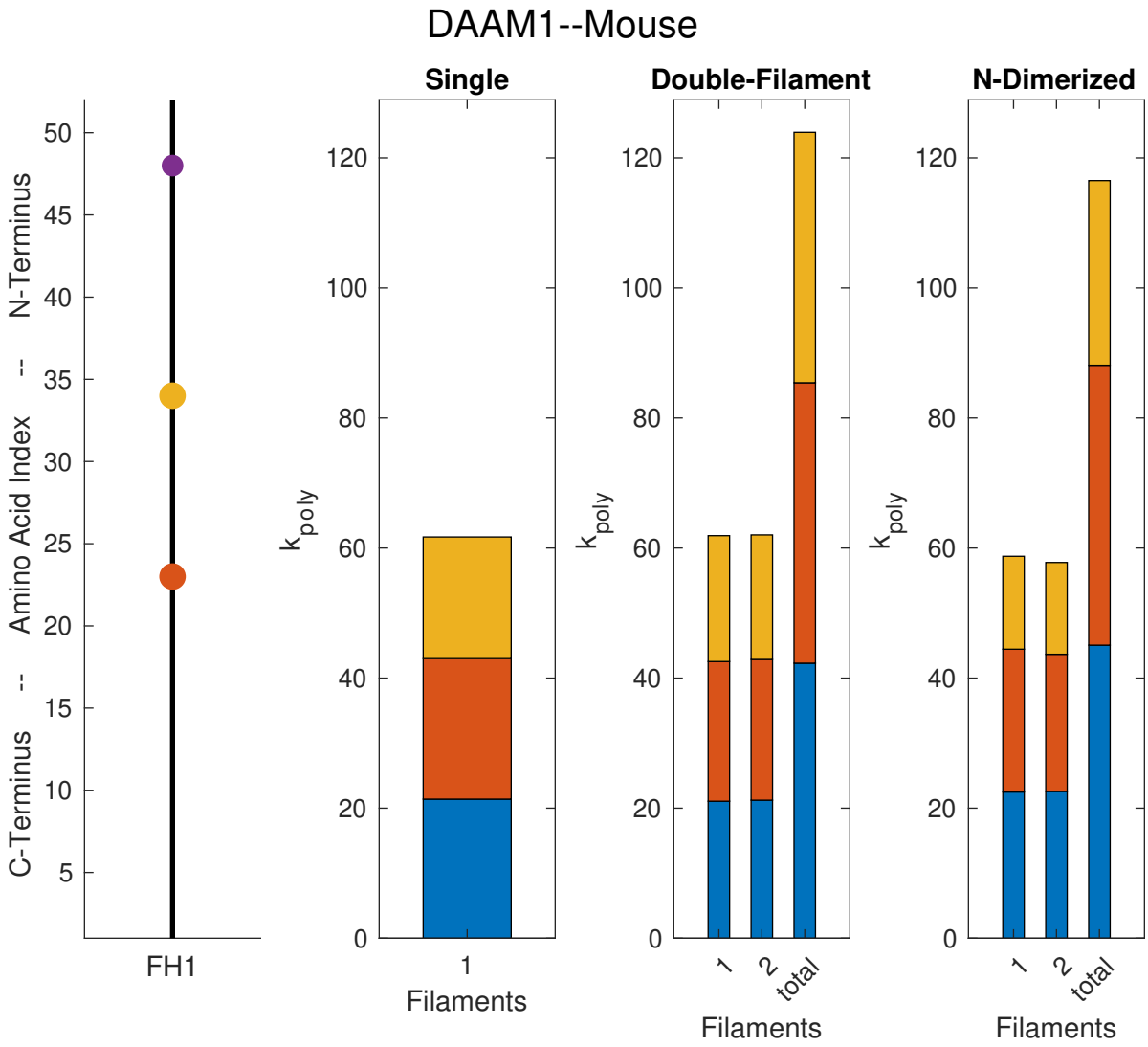

Diap3--Mouse
C-Terminus -- Amino Acid Index -- N-Terminus
50
45
40
35
30
25
20
15
10
5
FH1
Single
Double-Filament
N-Dimerized
$k_{poly}$
120
100
80
60
40
20
0
1
2
total
Filaments

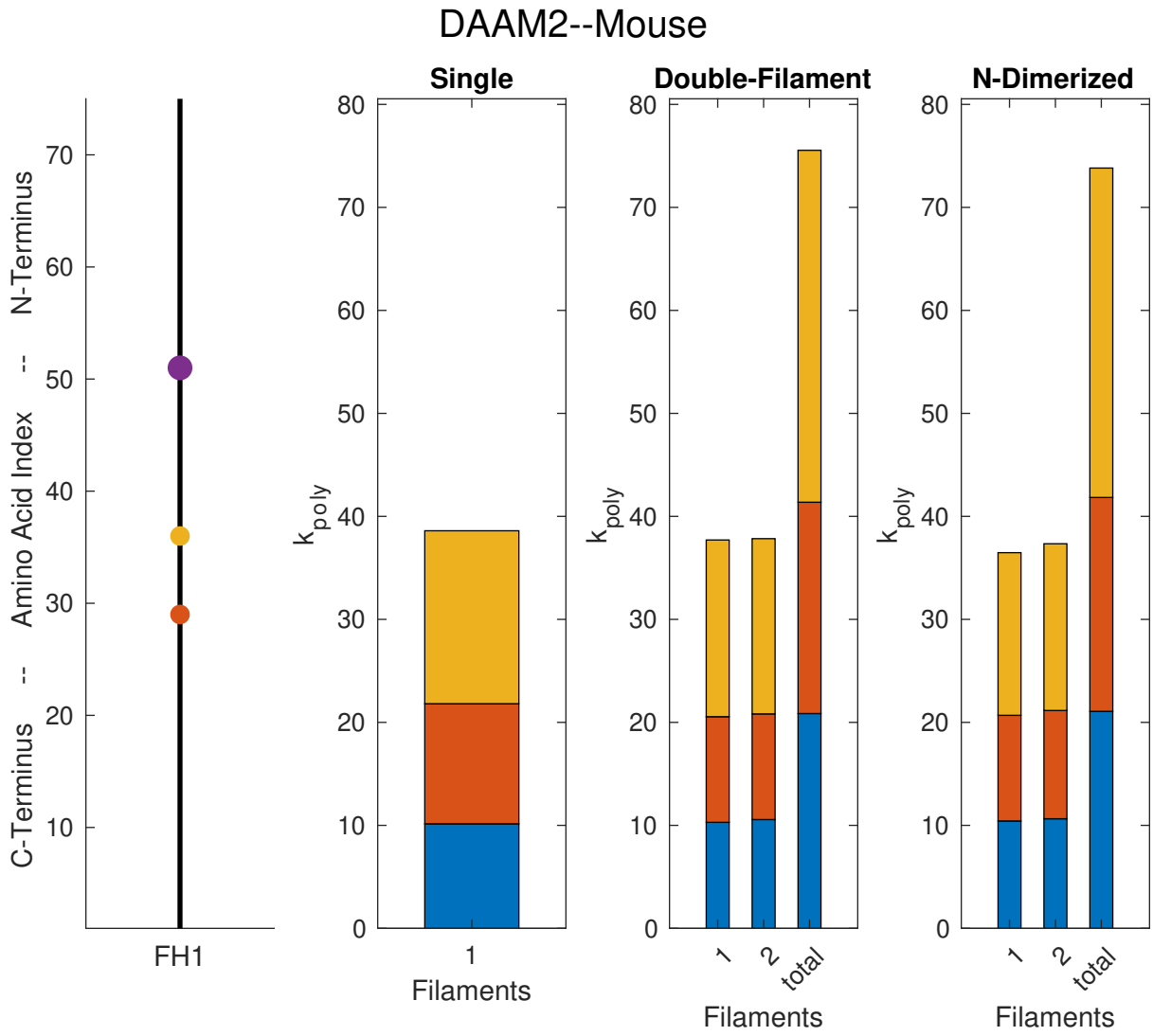

Diap1--Rat
C-Terminus -- Amino Acid Index -- N-Terminus
160
140
120
100
80
60
40
20
FH1
Single
Double-Filament
N-Dimerized
k poly
250
200
150
100
50
0
1
2
total
Filaments

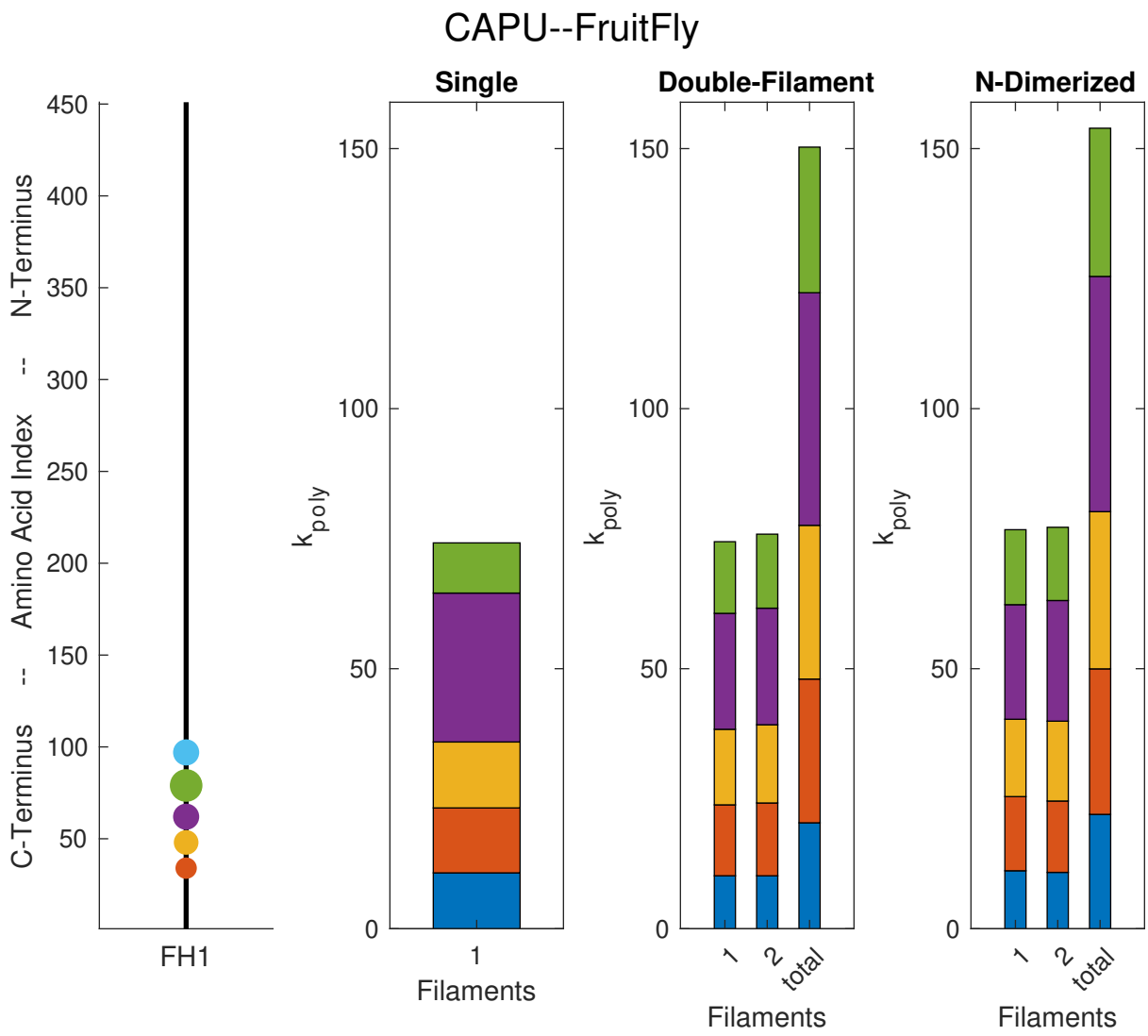

Diap3--Rat
C-Terminus -- Amino Acid Index -- N-Terminus
FH1
Single
Double-Filament
N-Dimerized
k poly
Filaments
1
2
total

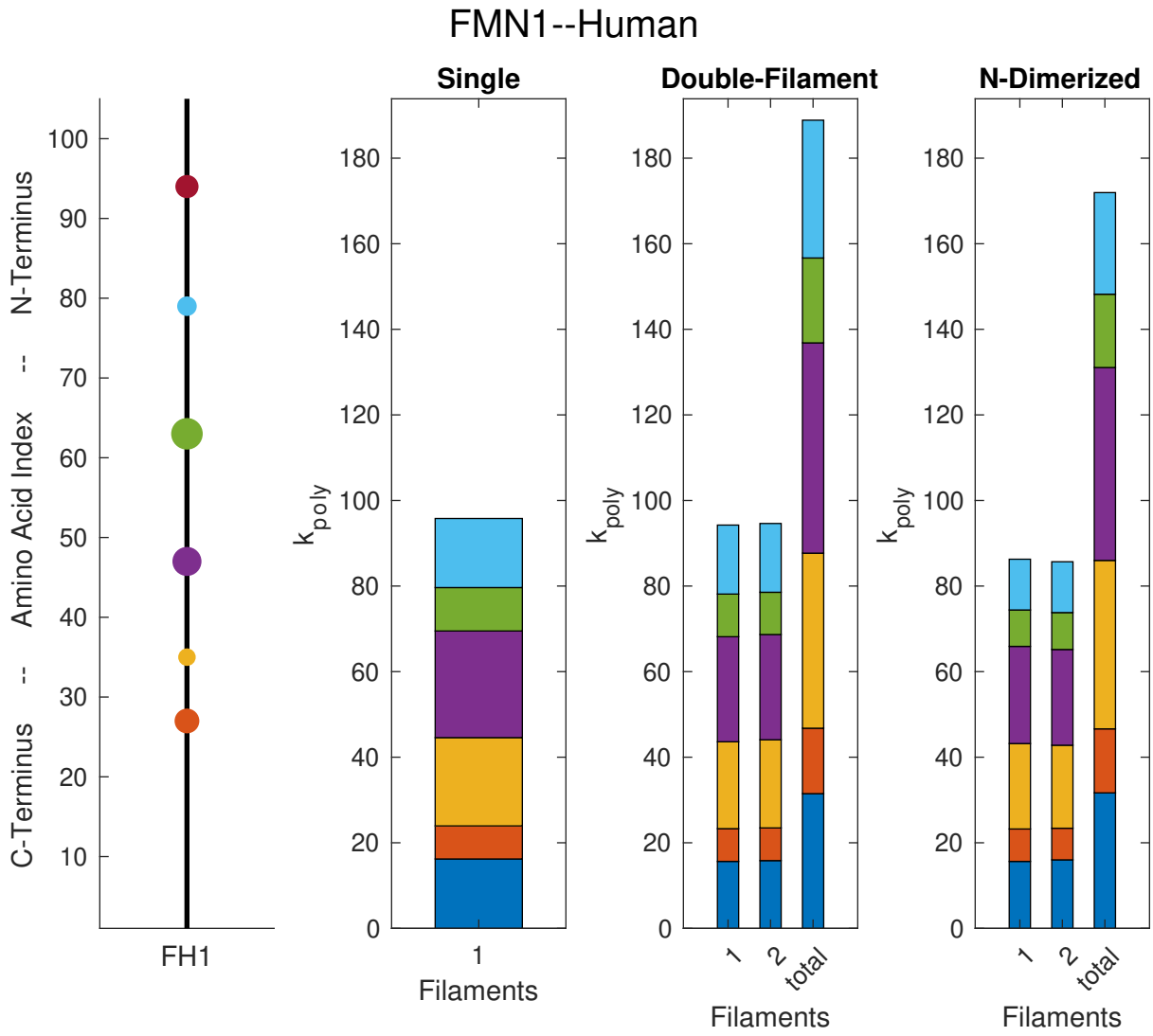

DAAM1--Human
Single
Double-Filament
N-Dimerized
C-Terminus -- Amino Acid Index -- N-Terminus
FH1
$k_{poly}$
Filaments
1
2
total

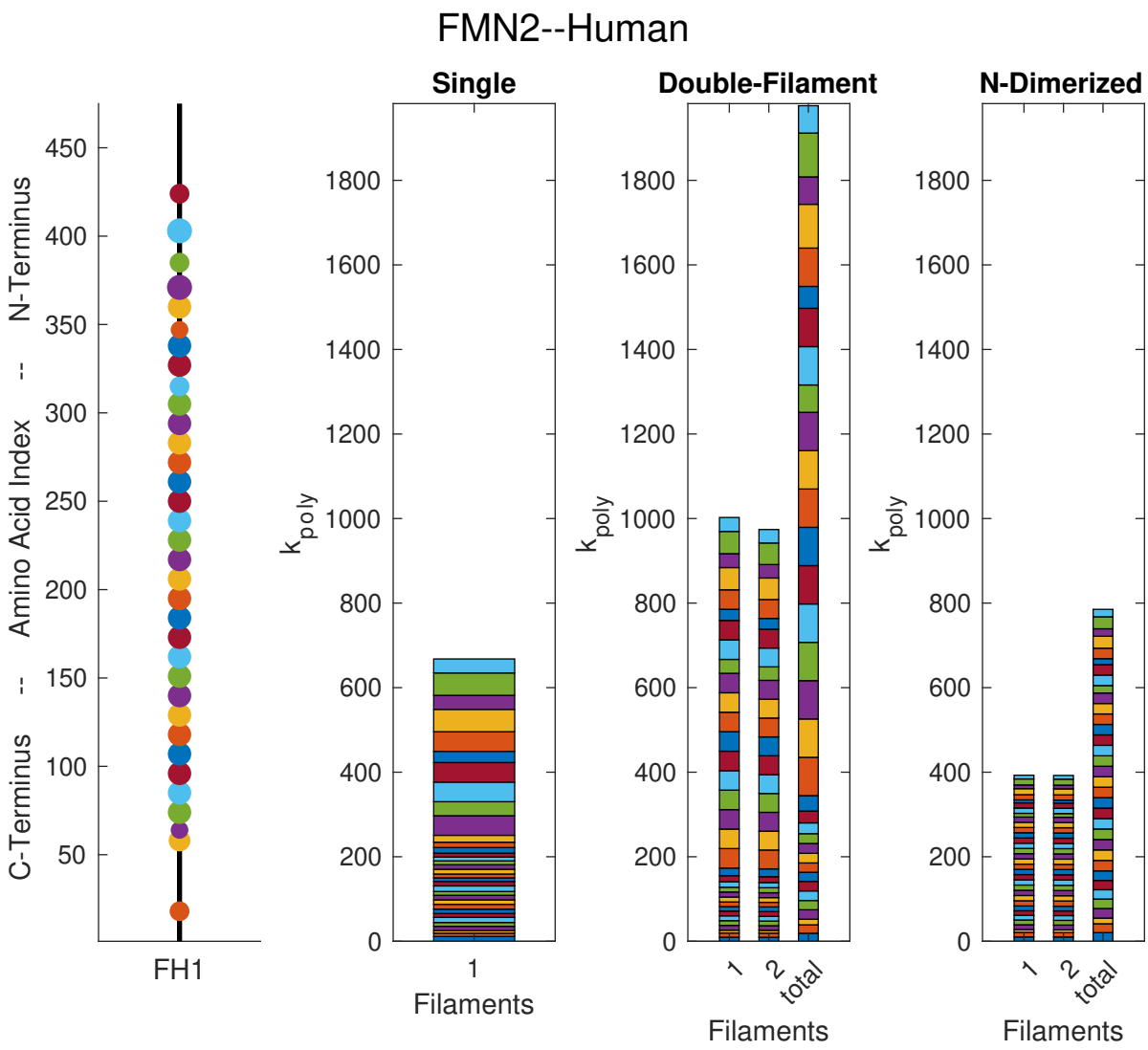

DAAM2--Human
Single
Double-Filament
N-Dimerized
C-Terminus -- Amino Acid Index -- N-Terminus
FH1
$k_{poly}$
Filaments
1
2
total

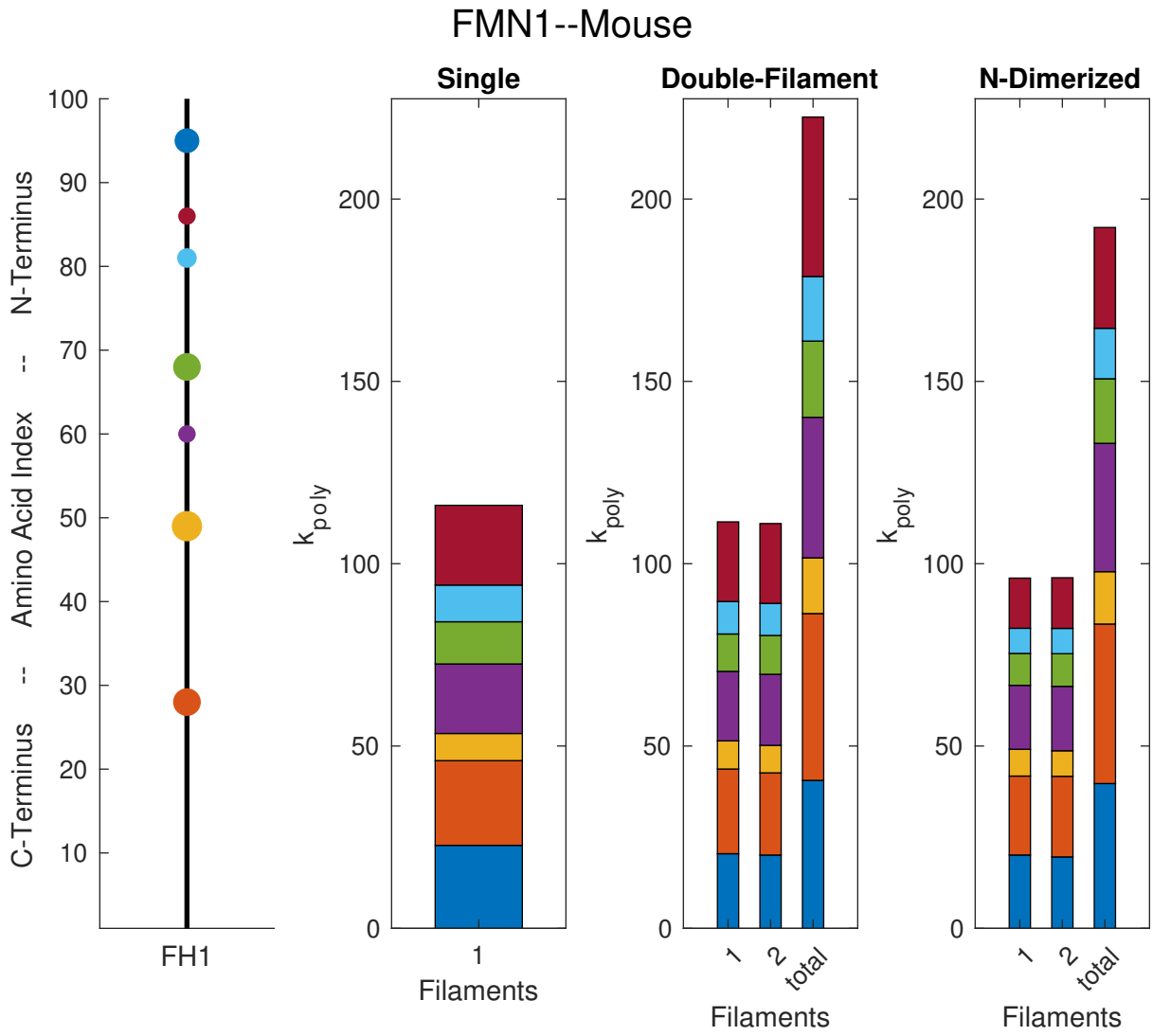

DAAM1--Mouse
C-Terminus -- Amino Acid Index -- N-Terminus
FH1
Single
Double-Filament
N-Dimerized
k_poly
Filaments
1
2
total

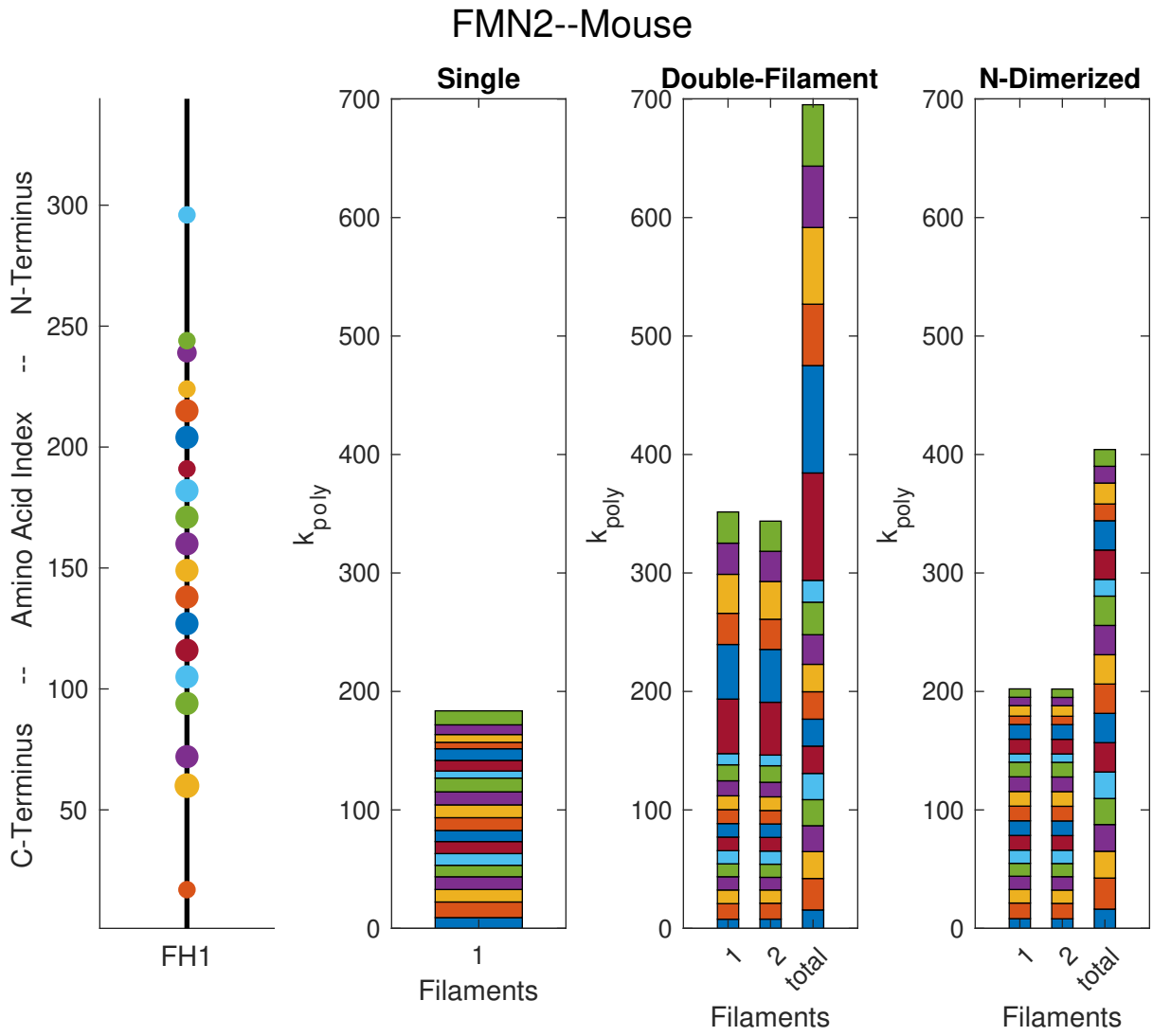

DAAM2--Mouse
C-Terminus -- Amino Acid Index -- N-Terminus
FH1
Single
Double-Filament
N-Dimerized
k poly
Filaments
1
2
total

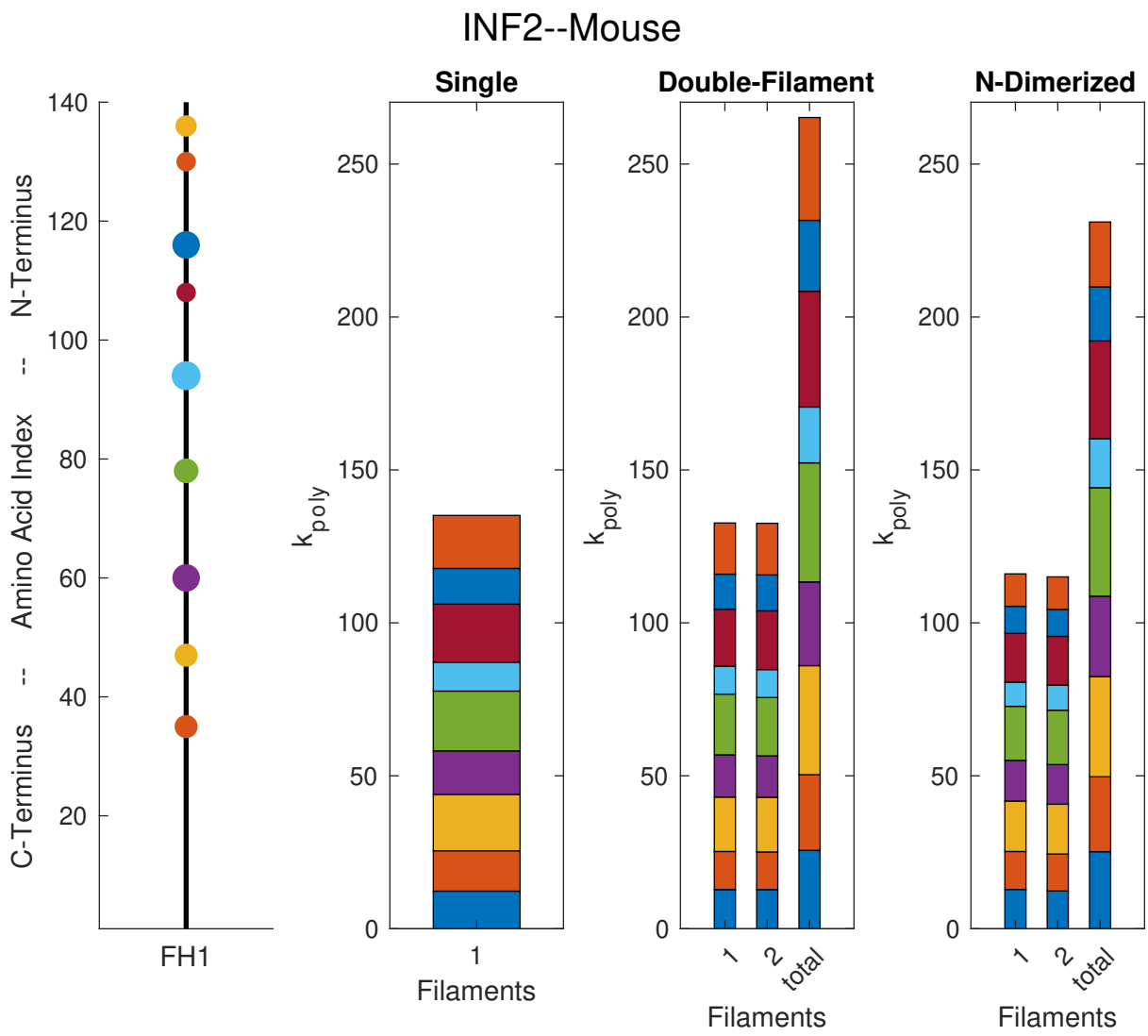

CAPU--FruitFly
C-Terminus -- Amino Acid Index -- N-Terminus
450
400
350
300
250
200
150
100
50
FH1
Single
Double-Filament
N-Dimerized
$k_{poly}$
150
100
50
0
1
2
total
Filaments

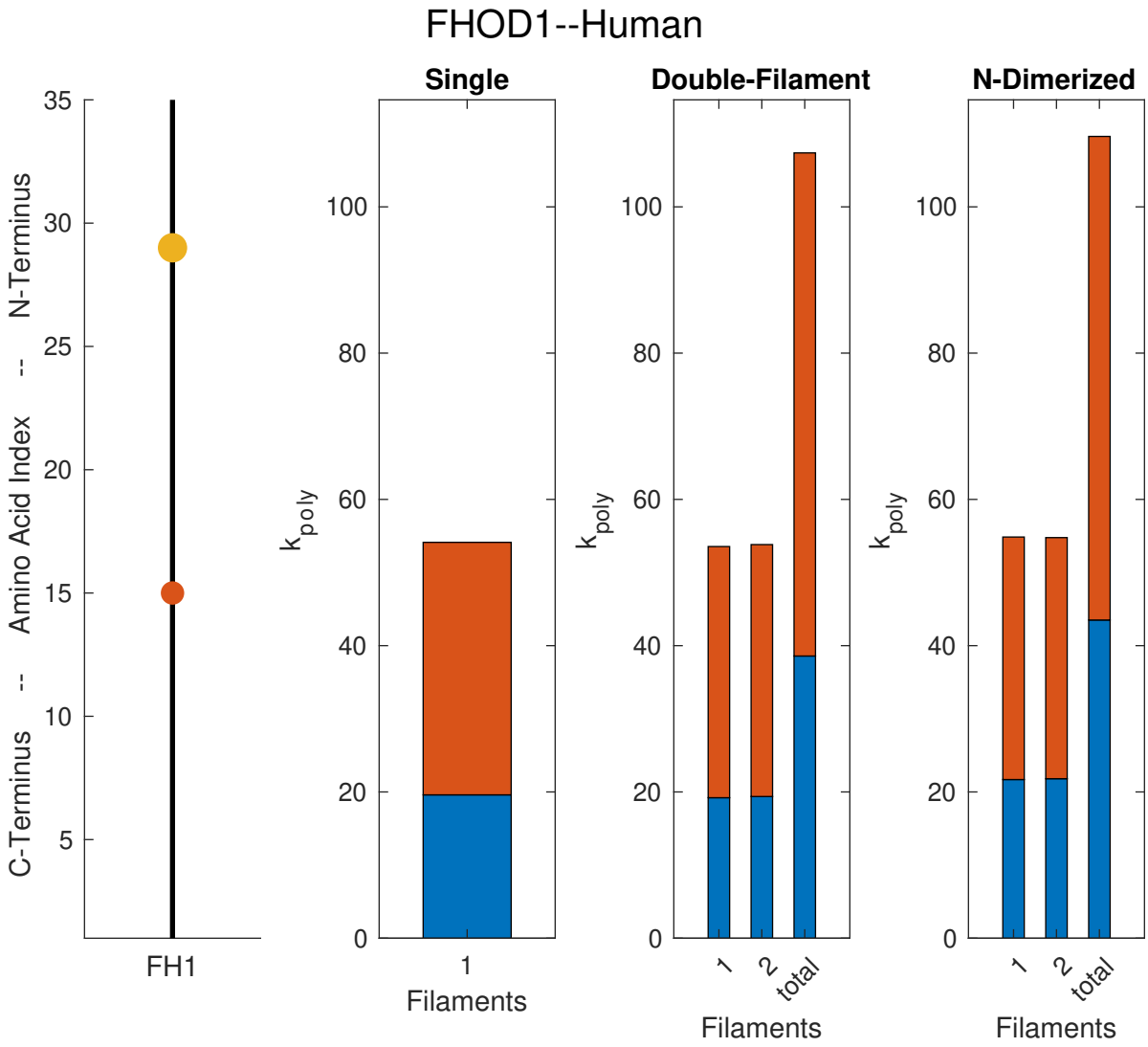

FMN1--Human
C-Terminus -- Amino Acid Index -- N-Terminus
FH1
Single
Double-Filament
N-Dimerized
k_poly
Filaments
1
2
total

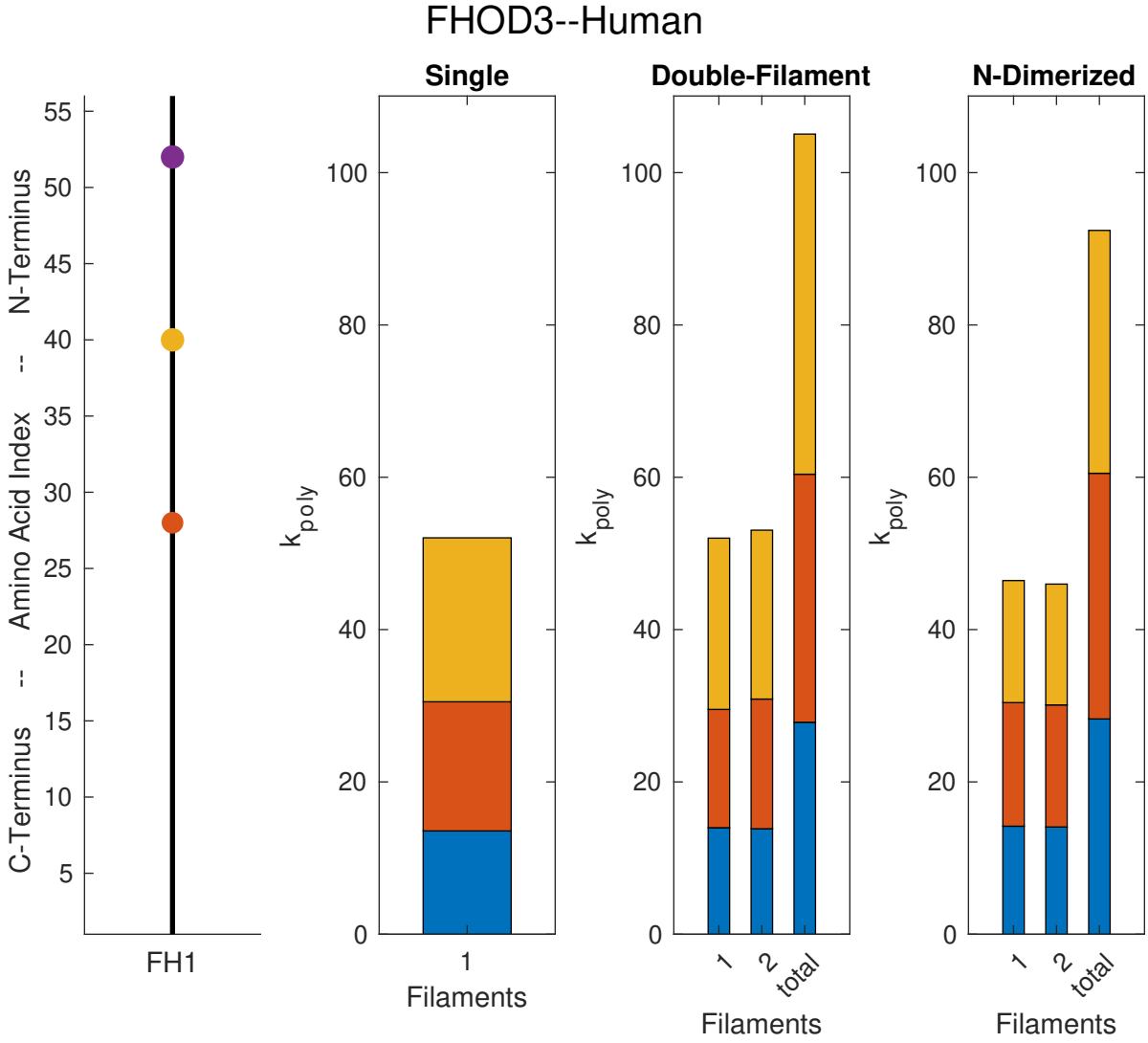

FMN2--Human
Single
Double-Filament
N-Dimerized
C-Terminus -- Amino Acid Index -- N-Terminus
450
400
350
300
250
200
150
100
50
FH1
$k_{poly}$
1800
1600
1400
1200
1000
800
600
400
200
0
1
Filaments
1
2
total
Filaments
Filaments

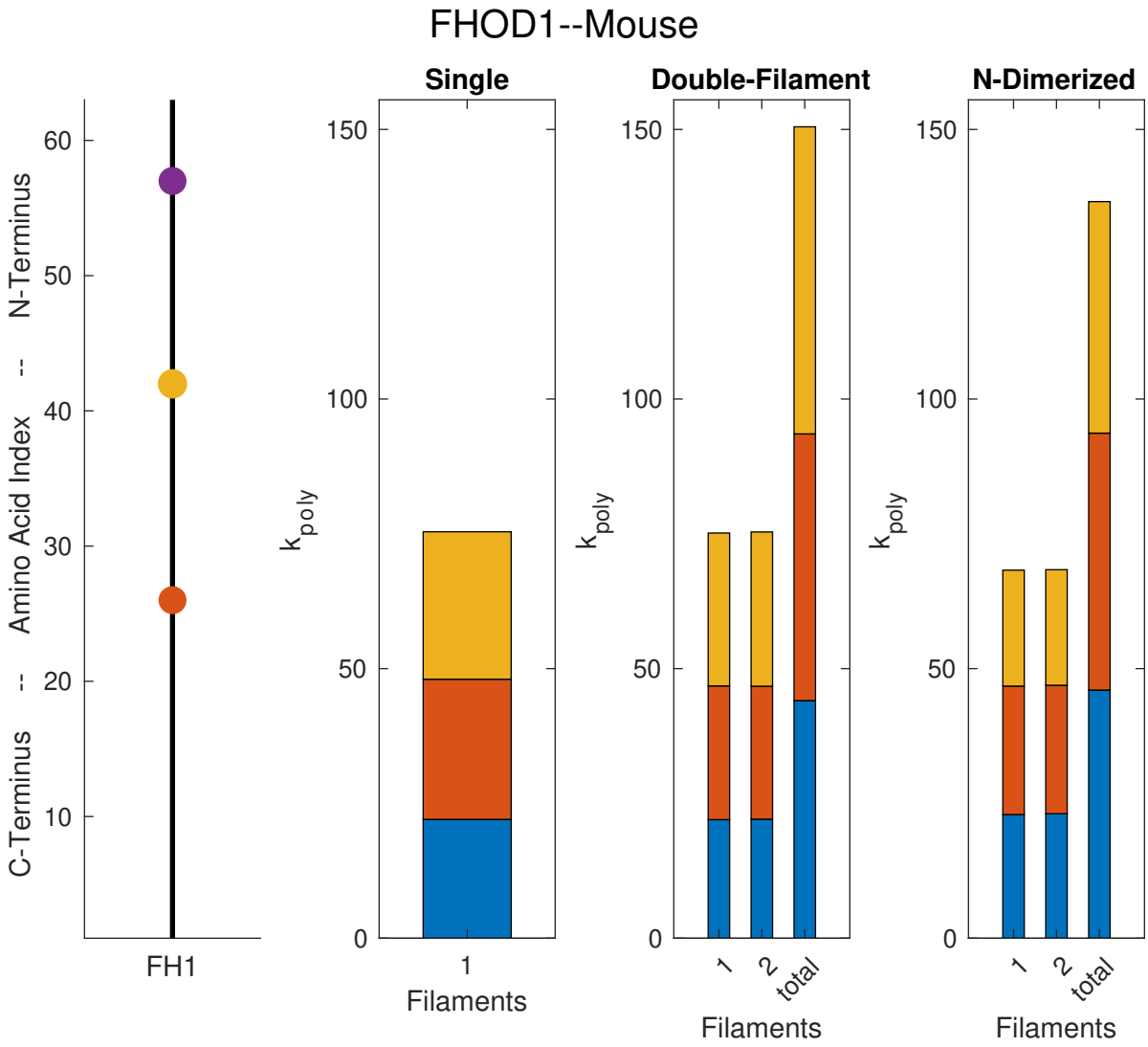

FMN1--Mouse
C-Terminus -- Amino Acid Index -- N-Terminus
100
90
80
70
60
50
40
30
20
10
FH1
Single
Double-Filament
N-Dimerized
k poly
200
150
100
50
0
1
Filaments
1
2
total
Filaments
Filaments

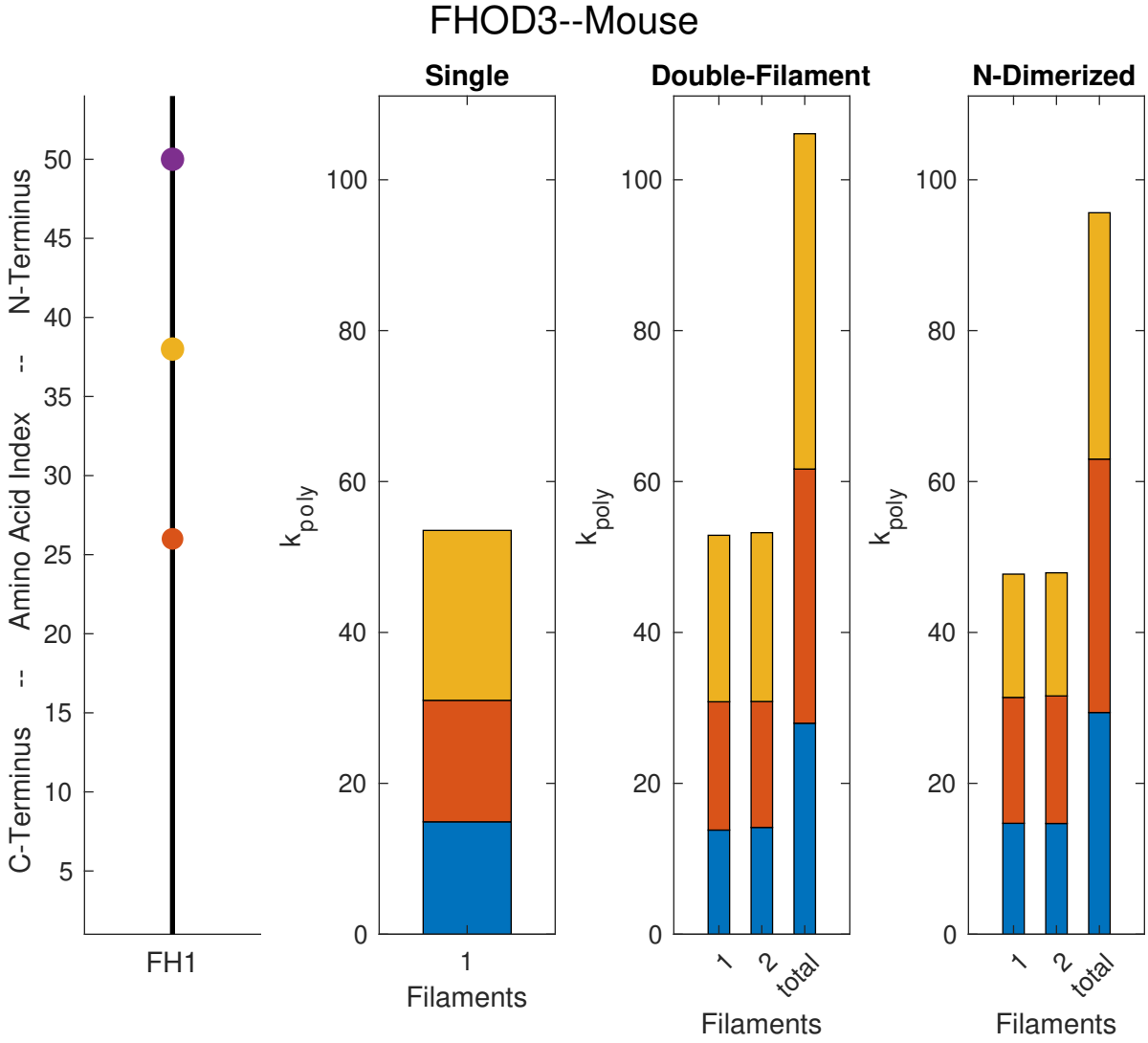

FMN2--Mouse
C-Terminus -- Amino Acid Index -- N-Terminus
300
250
200
150
100
50
FH1
Single
Double-Filament
N-Dimerized
700
600
500
400
300
200
100
0
k poly
1
Filaments
1
2
total
Filaments
Filaments

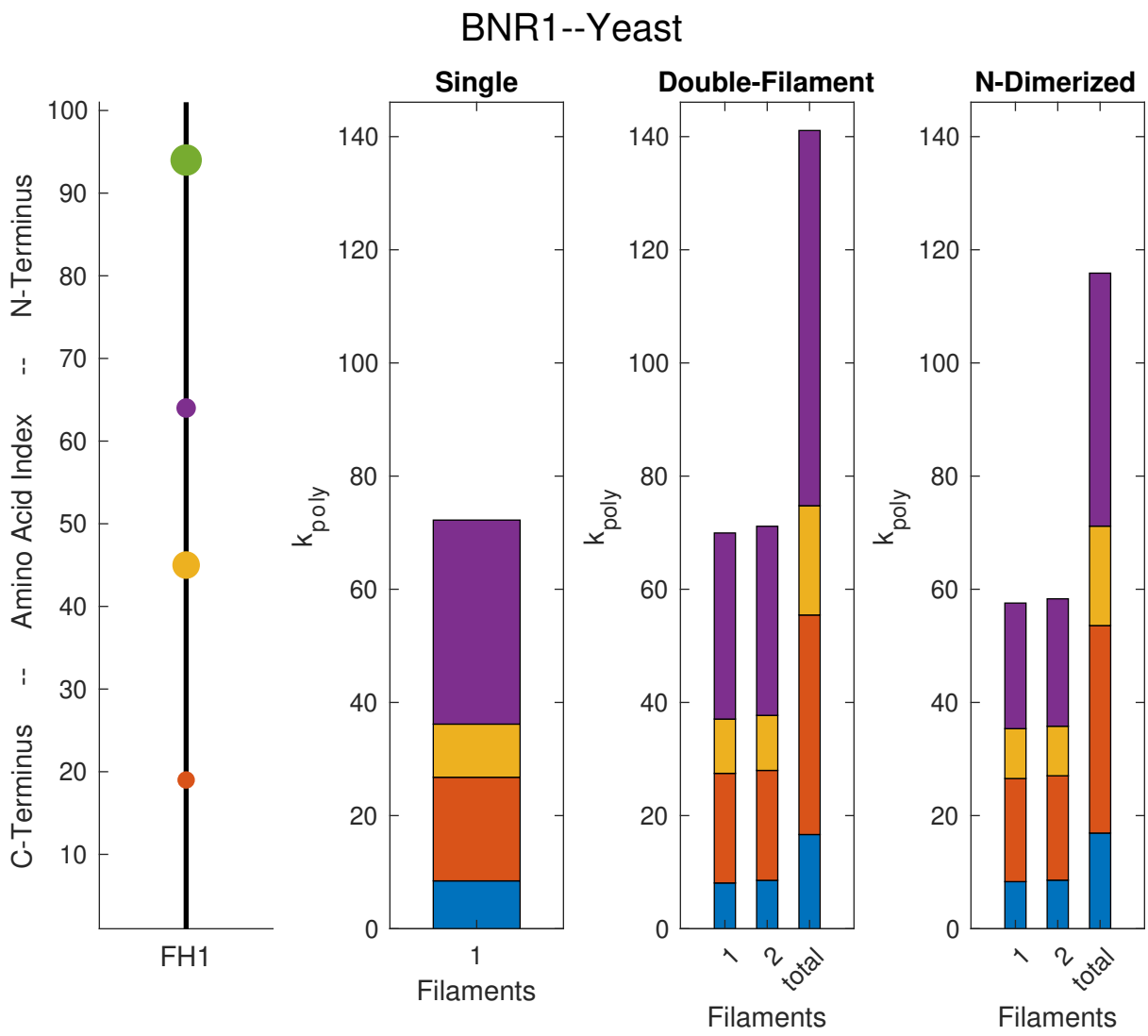

INF2--Mouse
C-Terminus -- Amino Acid Index -- N-Terminus
140
120
100
80
60
40
20
FH1
Single
Double-Filament
N-Dimerized
k poly
250
200
150
100
50
0
1
2
total
Filaments

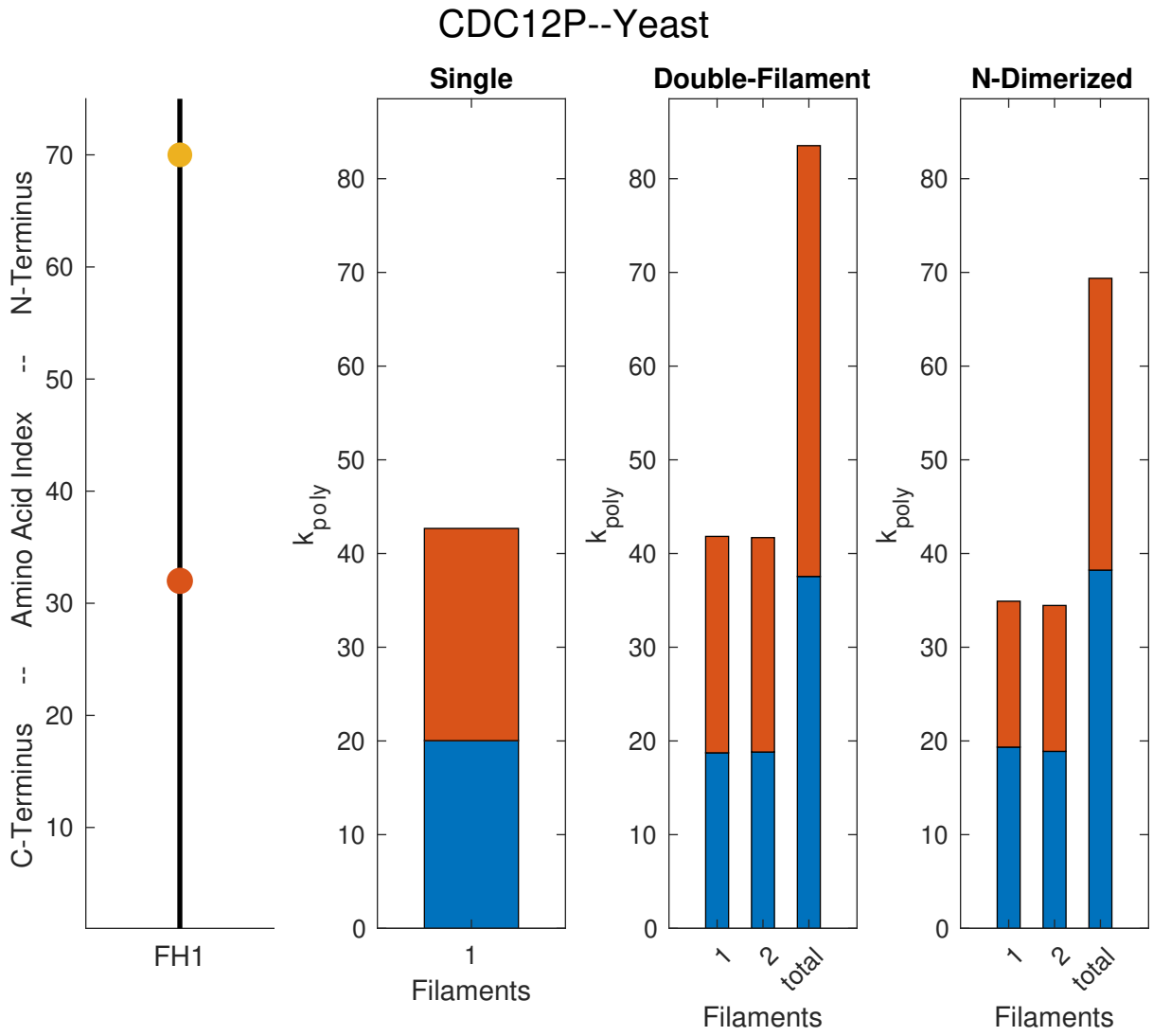

FHOD1--Human
C-Terminus -- Amino Acid Index -- N-Terminus
35
30
25
20
15
10
5
FH1
Single
Double-Filament
N-Dimerized
k poly
100
80
60
40
20
0
1
Filaments
1
2
total
Filaments
Filaments

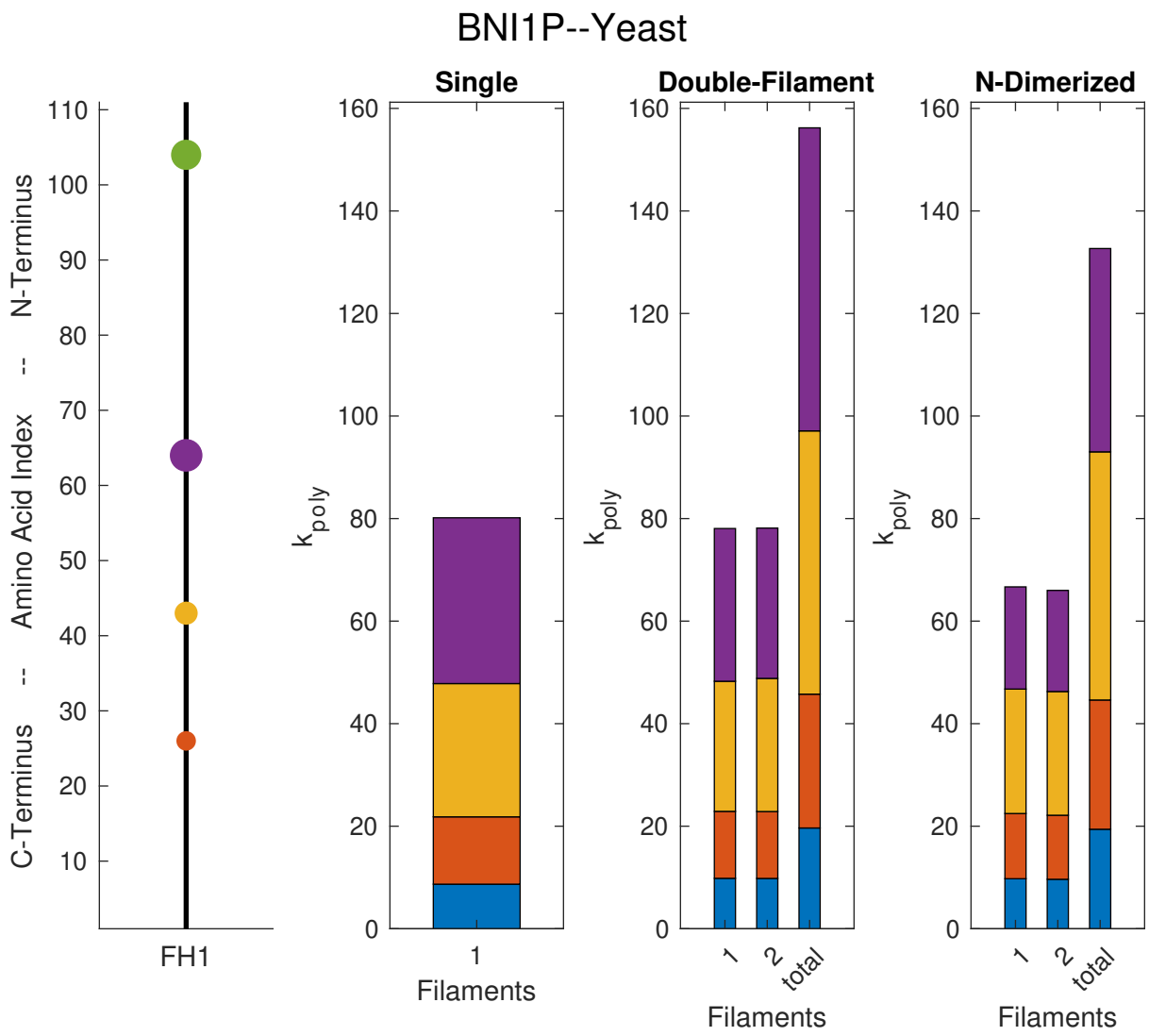

FHOD3--Human
C-Terminus -- Amino Acid Index -- N-Terminus
55
50
45
40
35
30
25
20
15
10
5
FH1
Single
Double-Filament
N-Dimerized
$k_{poly}$
100
80
60
40
20
0
1
Filaments
1
2
total
Filaments
Filaments

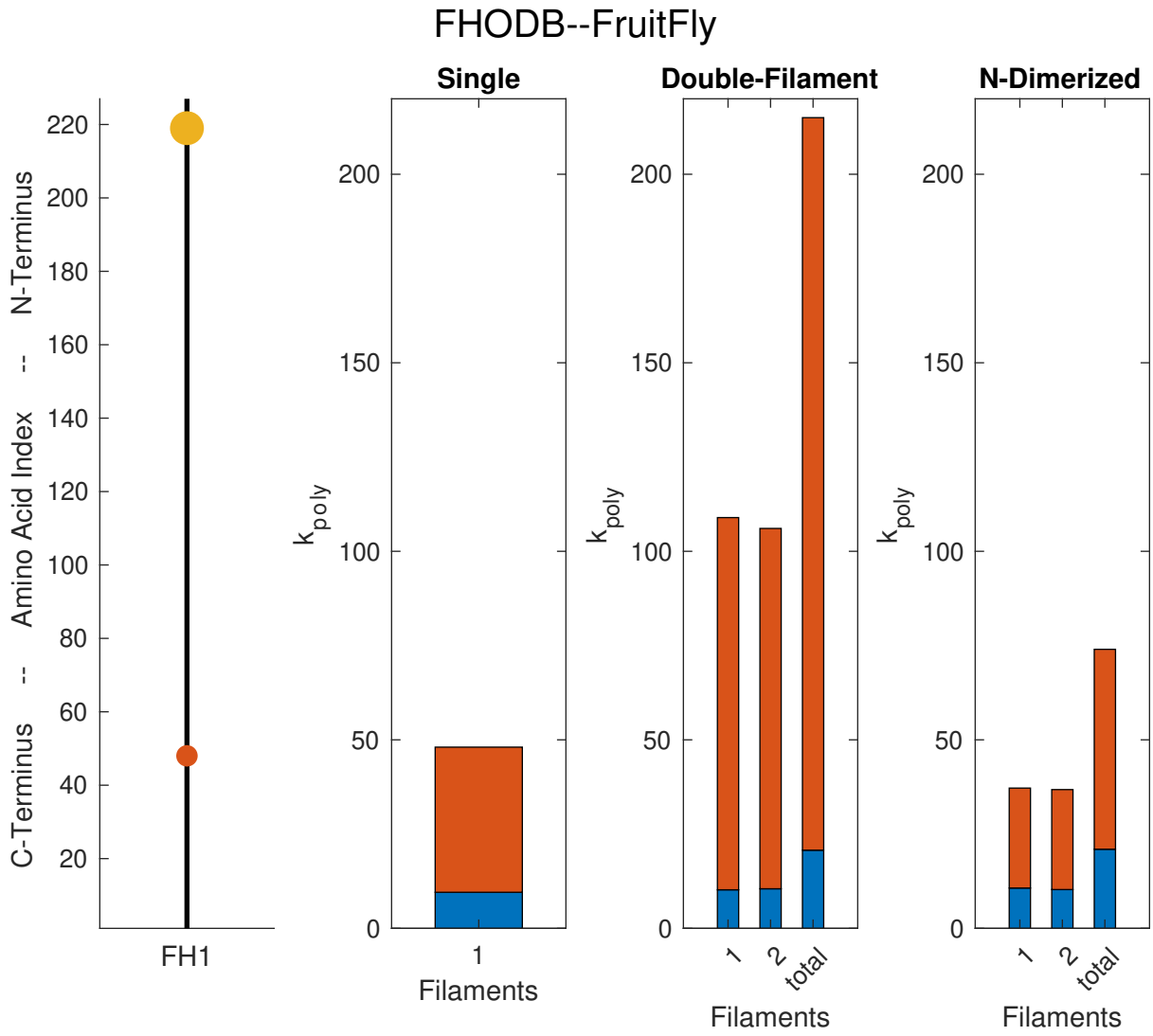

FHOD1--Mouse
C-Terminus -- Amino Acid Index -- N-Terminus
60
50
40
30
20
10
FH1
Single
Double-Filament
N-Dimerized
k poly
150
100
50
0
1
Filaments
1
2
total
Filaments
Filaments

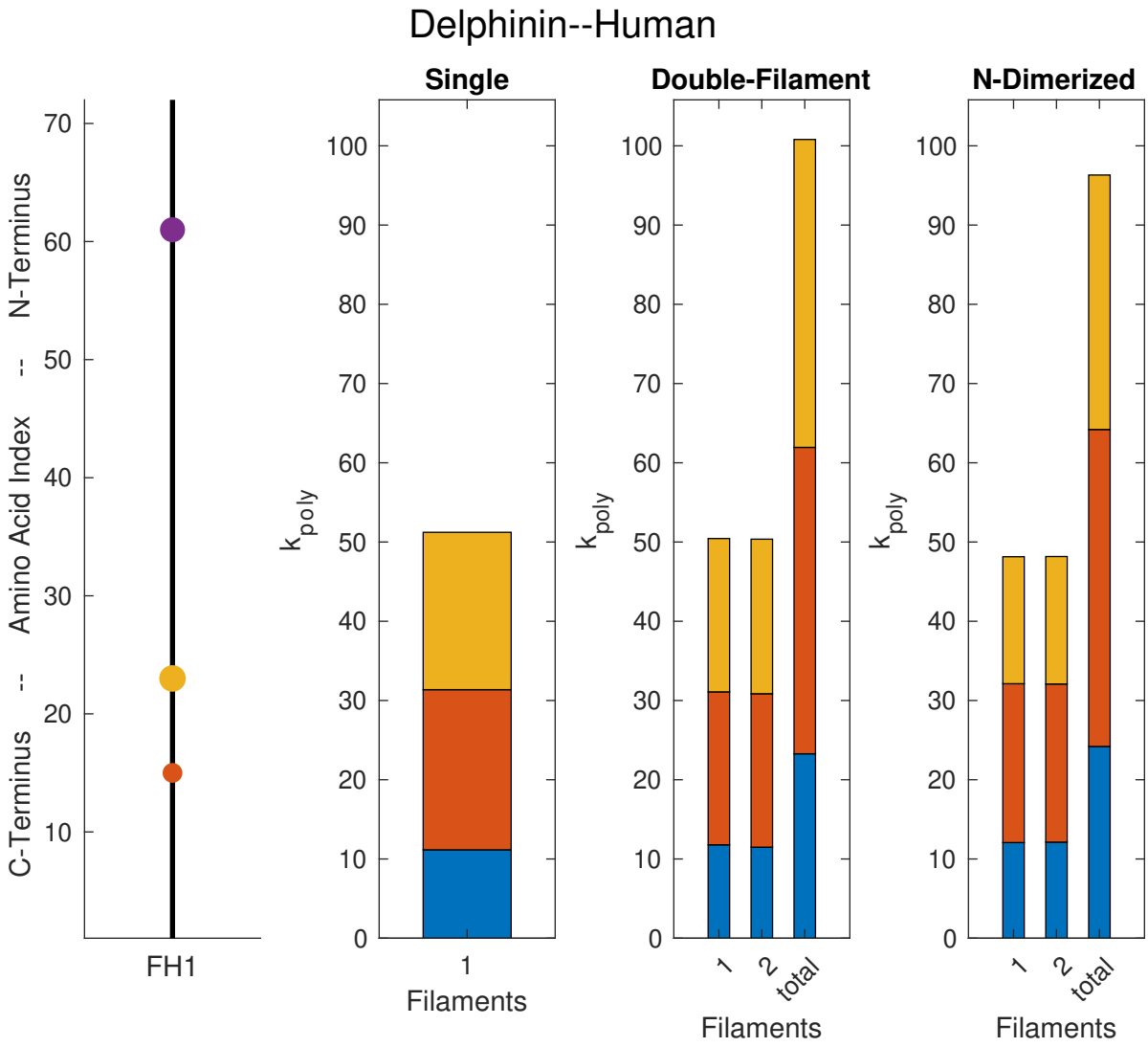

FHOD3--Mouse
C-Terminus -- Amino Acid Index -- N-Terminus
5
10
15
20
25
30
35
40
45
50
FH1
Single
Double-Filament
N-Dimerized
$k_{poly}$
0
20
40
60
80
100
1
Filaments
1
2
total
Filaments
Filaments

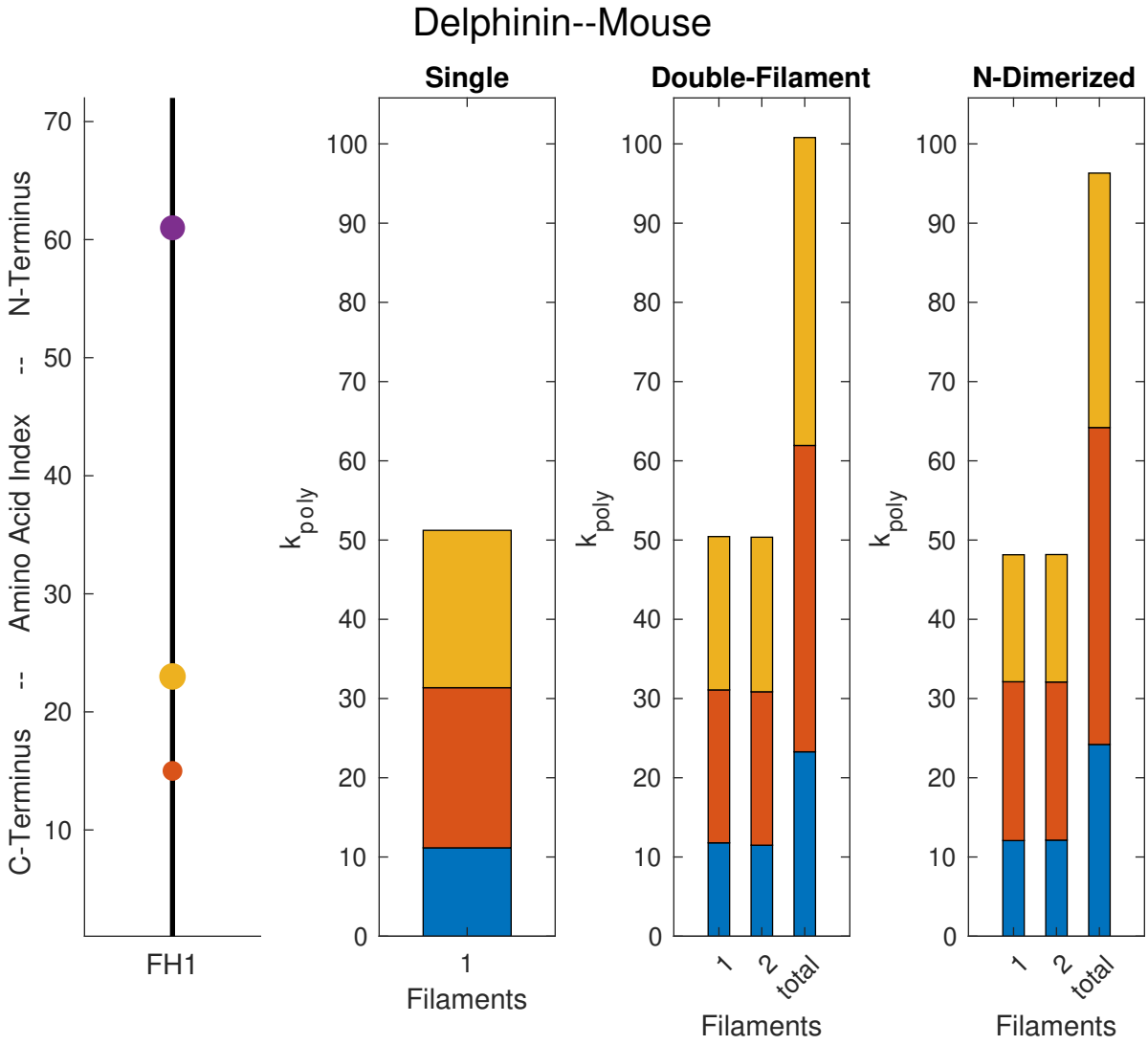

BNR1--Yeast
C-Terminus -- Amino Acid Index -- N-Terminus
100
90
80
70
60
50
40
30
20
10
FH1
Single
Double-Filament
N-Dimerized
$k_{poly}$
140
120
100
80
60
40
20
0
1
Filaments
1
2
total
Filaments
Filaments

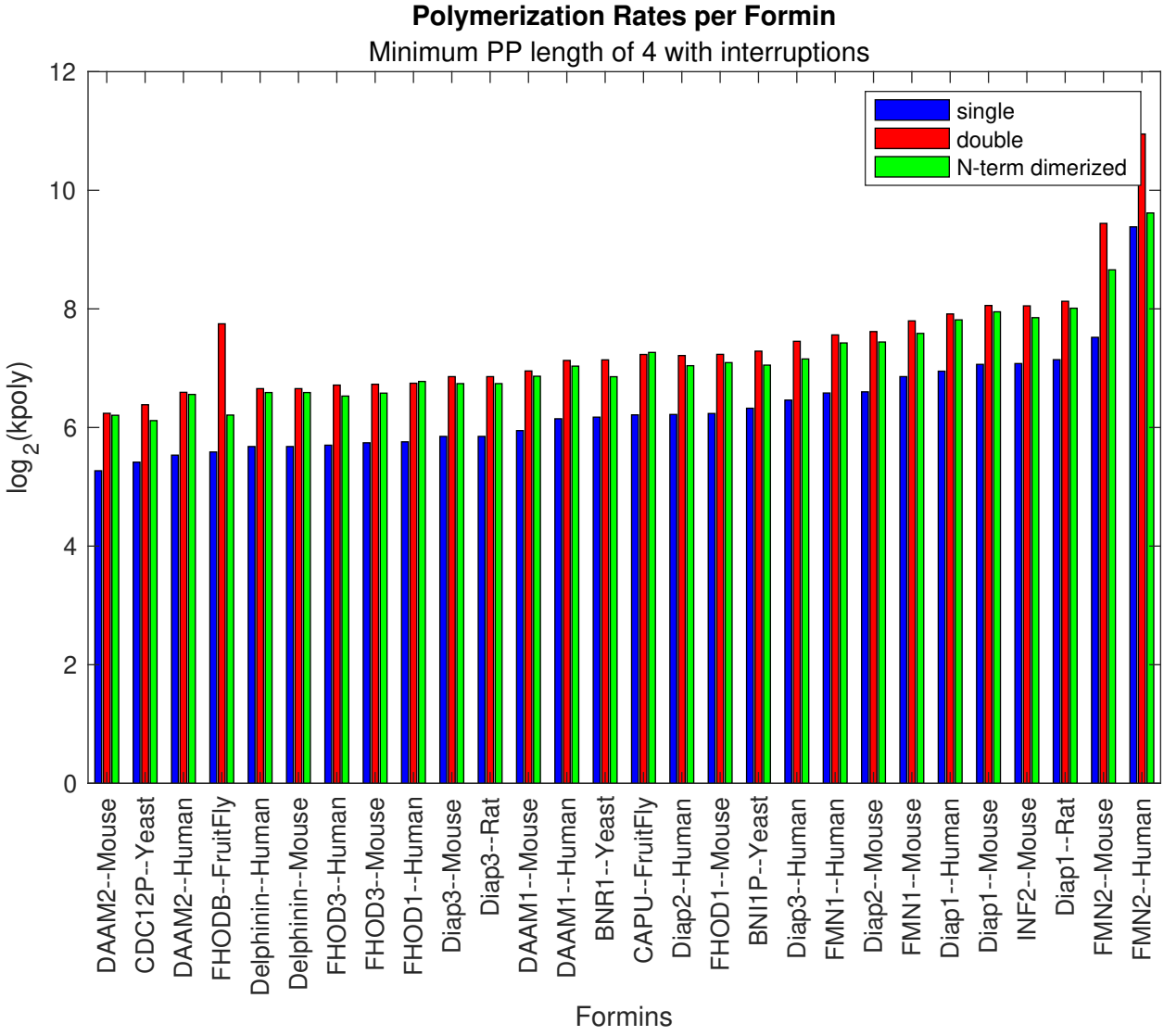

CDC12P--Yeast
C-Terminus -- Amino Acid Index -- N-Terminus
FH1
Single
Double-Filament
N-Dimerized
k poly
Filaments
1
2
total

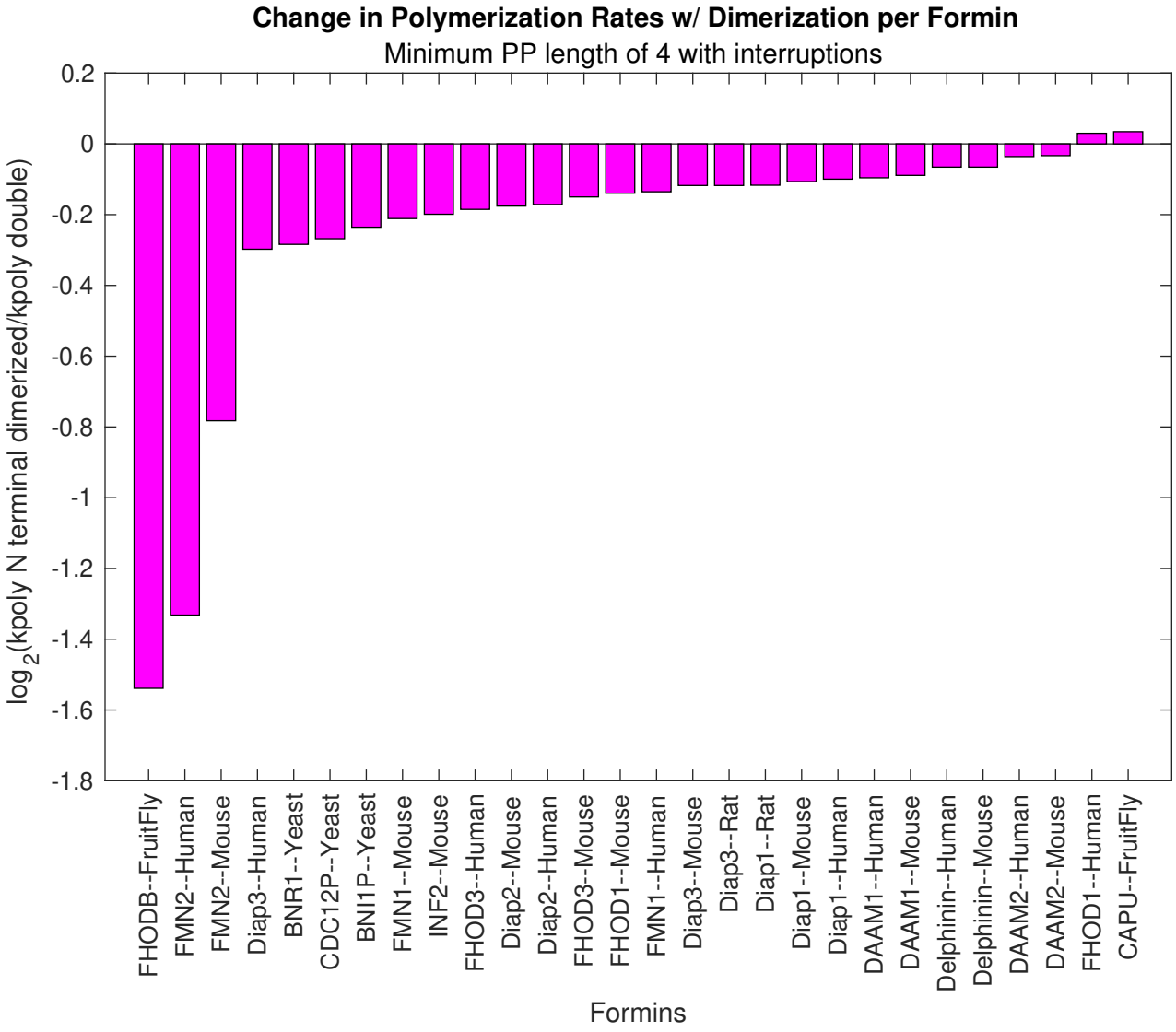

BNI1P--Yeast
C-Terminus -- Amino Acid Index -- N-Terminus
110
100
90
80
70
60
50
40
30
20
10
FH1
Single
Double-Filament
N-Dimerized
k poly
160
140
120
100
80
60
40
20
0
1
Filaments
1
2
total
Filaments
Filaments

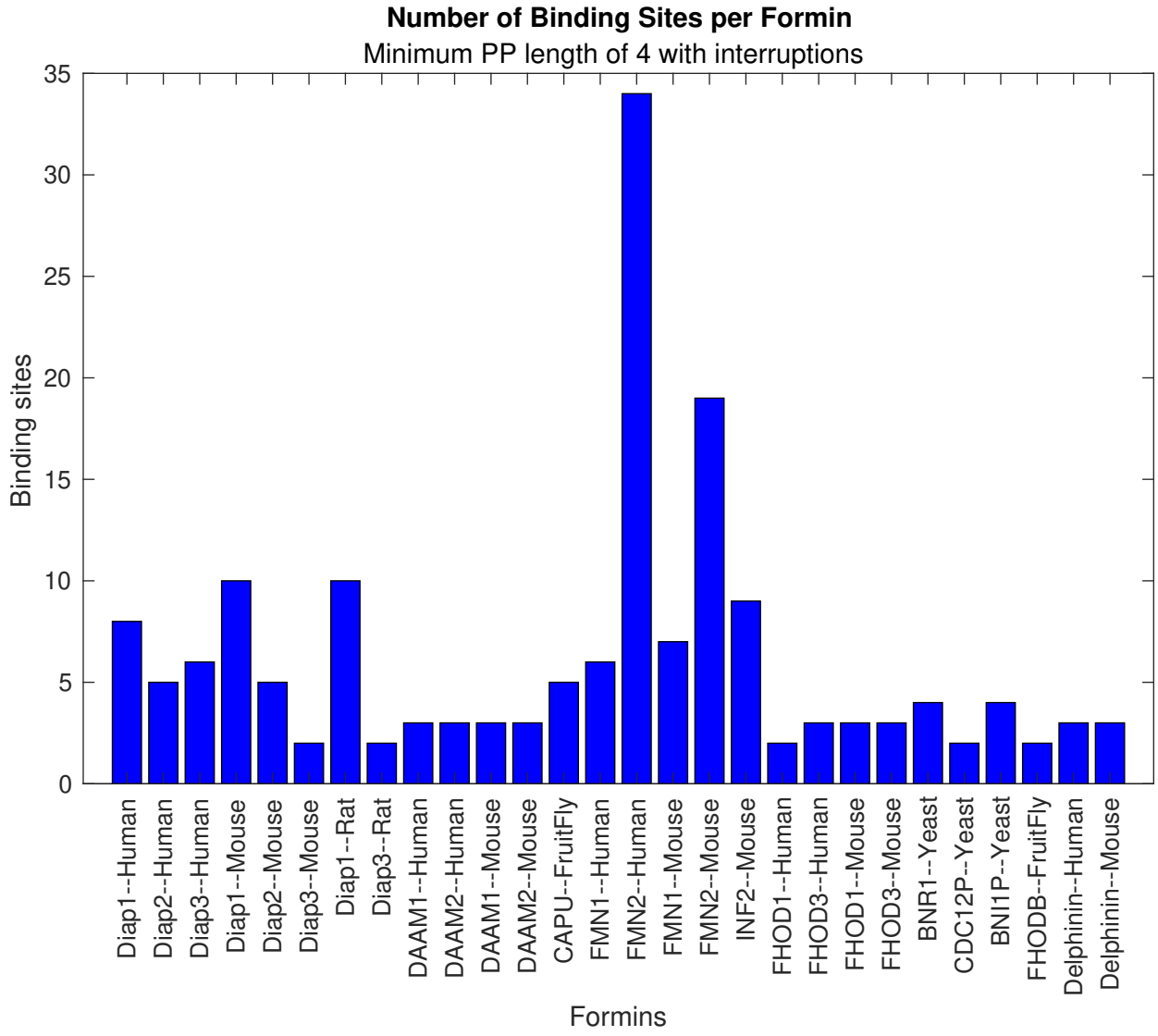

FHODB--FruitFly
Single
Double-Filament
N-Dimerized
C-Terminus -- Amino Acid Index -- N-Terminus
220
200
180
160
140
120
100
80
60
40
20
FH1
$k_{poly}$
200
150
100
50
0
1
Filaments
1
2
total
Filaments
Filaments

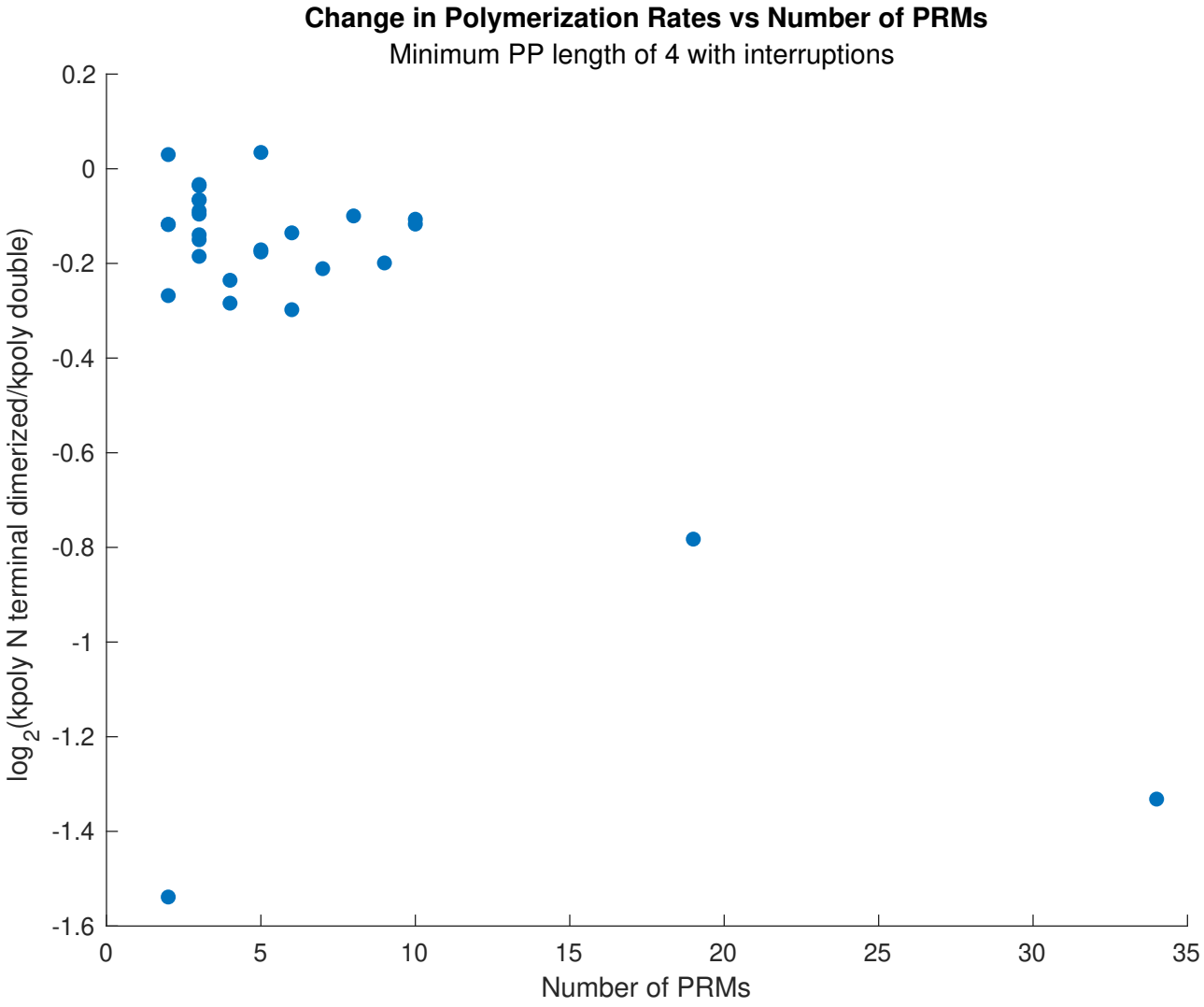

Delphinin--Human
Single
Double-Filament
N-Dimerized
C-Terminus -- Amino Acid Index -- N-Terminus
FH1
$k_{poly}$
Filaments
1
2
total

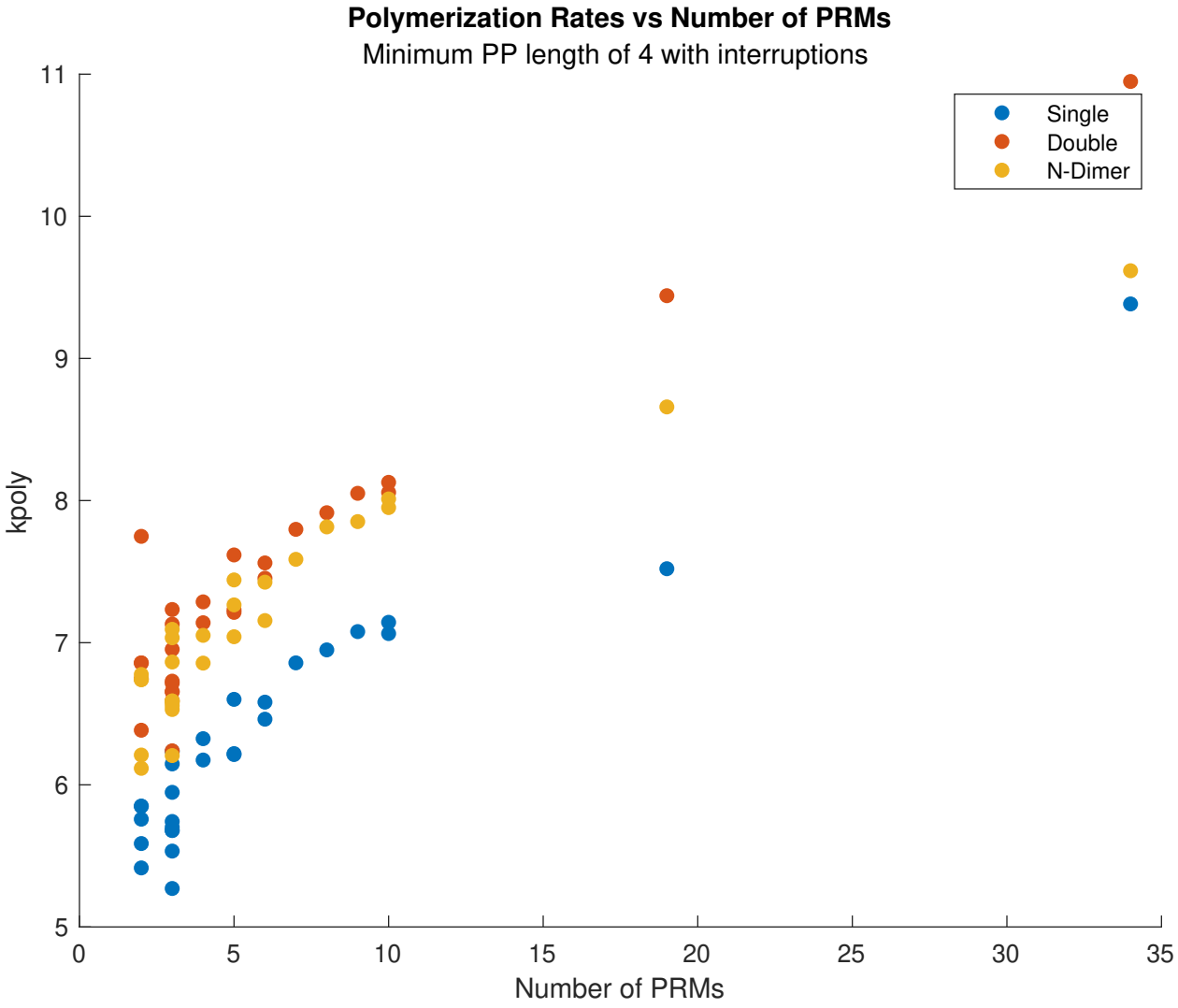

Delphinin--Mouse
Single
Double-Filament
N-Dimerized
C-Terminus -- Amino Acid Index -- N-Terminus
FH1
$k_{poly}$
Filaments
1
2
total

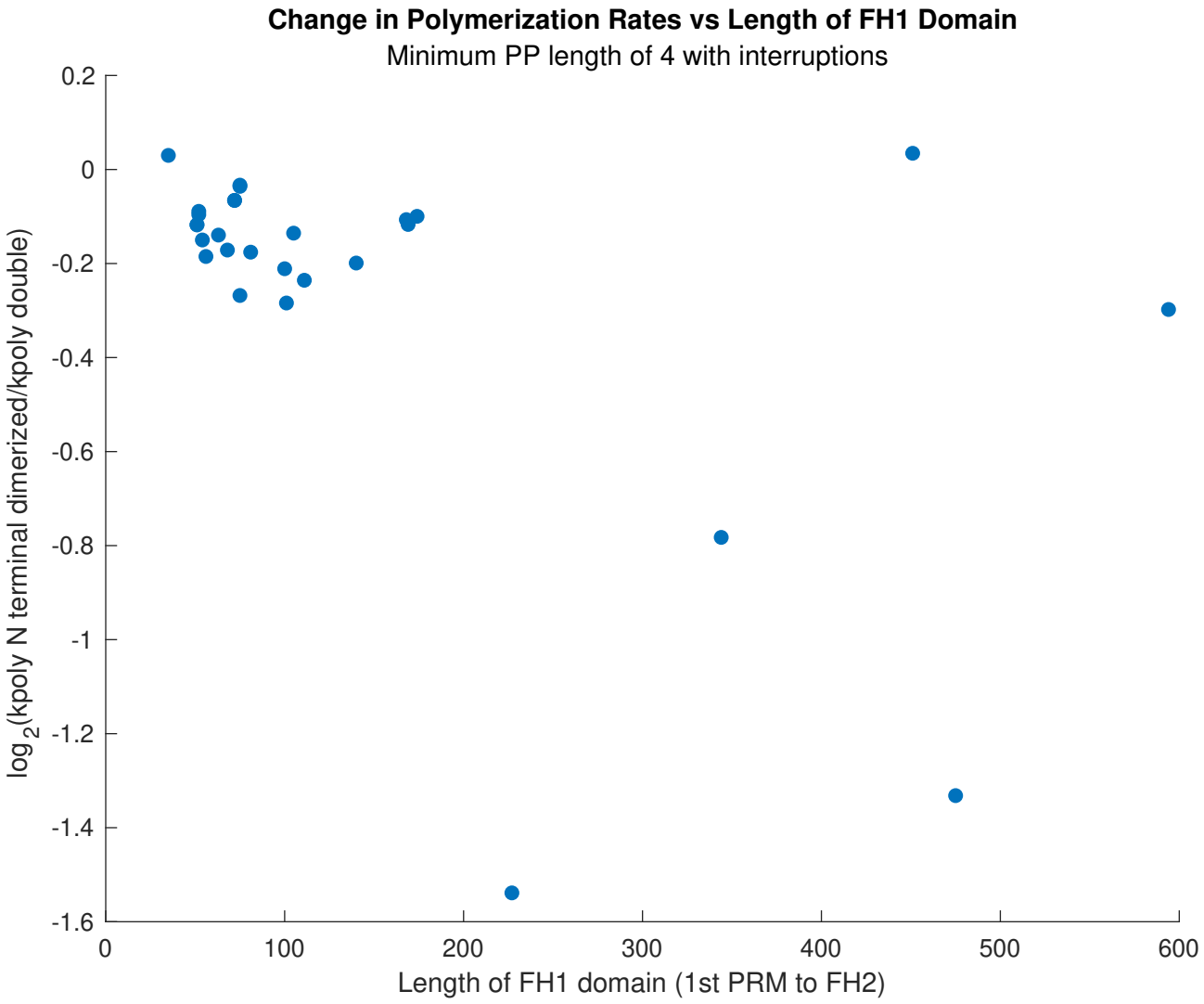

Polymerization Rates per Formin
Minimum PP length of 4 with interruptions
single
double
N-term dimerized
log 2(kpoly)
0
2
4
6
8
10
12
DAAM2--Mouse
CDC12P--Yeast
DAAM2--Human
FHODB--FruitFly
Delphinin--Human
Delphinin--Mouse
FHOD3--Human
FHOD3--Mouse
FHOD1--Human
Diap3--Mouse
Diap3--Rat
DAAM1--Mouse
DAAM1--Human
BNR1--Yeast
CAPU--FruitFly
Diap2--Human
FHOD1--Mouse
BNI1P--Yeast
Diap3--Human
FMN1--Human
Diap2--Mouse
FMN1--Mouse
Diap1--Human
Diap1--Mouse
INF2--Mouse
Diap1--Rat
FMN2--Mouse
FMN2--Human
Formins

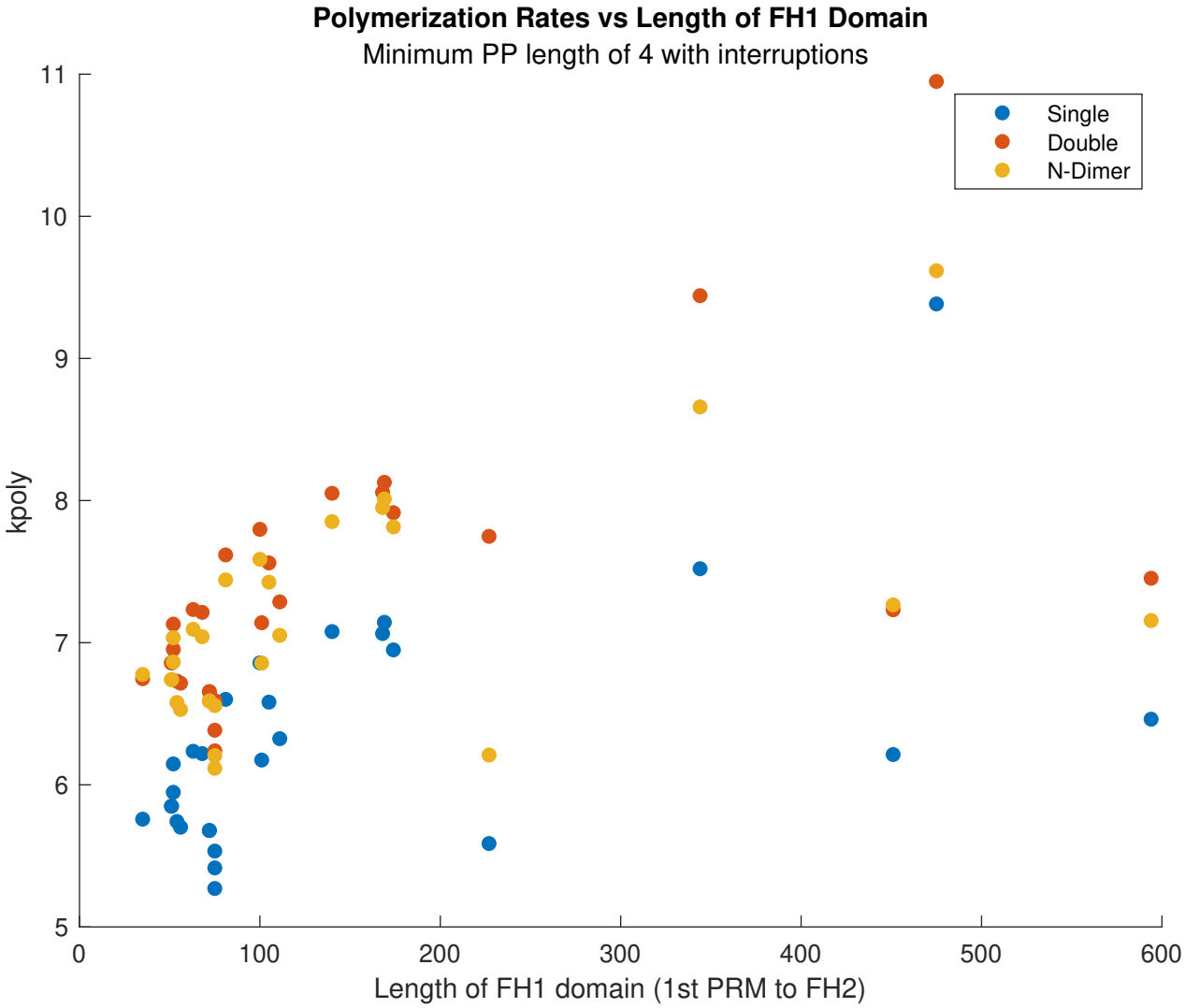

Change in Polymerization Rates w/ Dimerization per Formin
Minimum PP length of 4 with interruptions
log2(kpoly N terminal dimerized/kpoly double)
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
-1.2
-1.4
-1.6
-1.8
FHODB--FruitFly
FMN2--Human
FMN2--Mouse
Diap3--Human
BNR1--Yeast
CDC12P--Yeast
BNI1P--Yeast
FMN1--Mouse
INF2--Mouse
FHOD3--Human
Diap2--Mouse
Diap2--Human
FHOD3--Mouse
FHOD1--Mouse
FMN1--Human
Diap3--Mouse
Diap3--Rat
Diap1--Rat
Diap1--Mouse
Diap1--Human
DAAM1--Human
DAAM1--Mouse
Delphinin--Human
Delphinin--Mouse
DAAM2--Human
DAAM2--Mouse
FHOD1--Human
CAPU--FruitFly
Formins

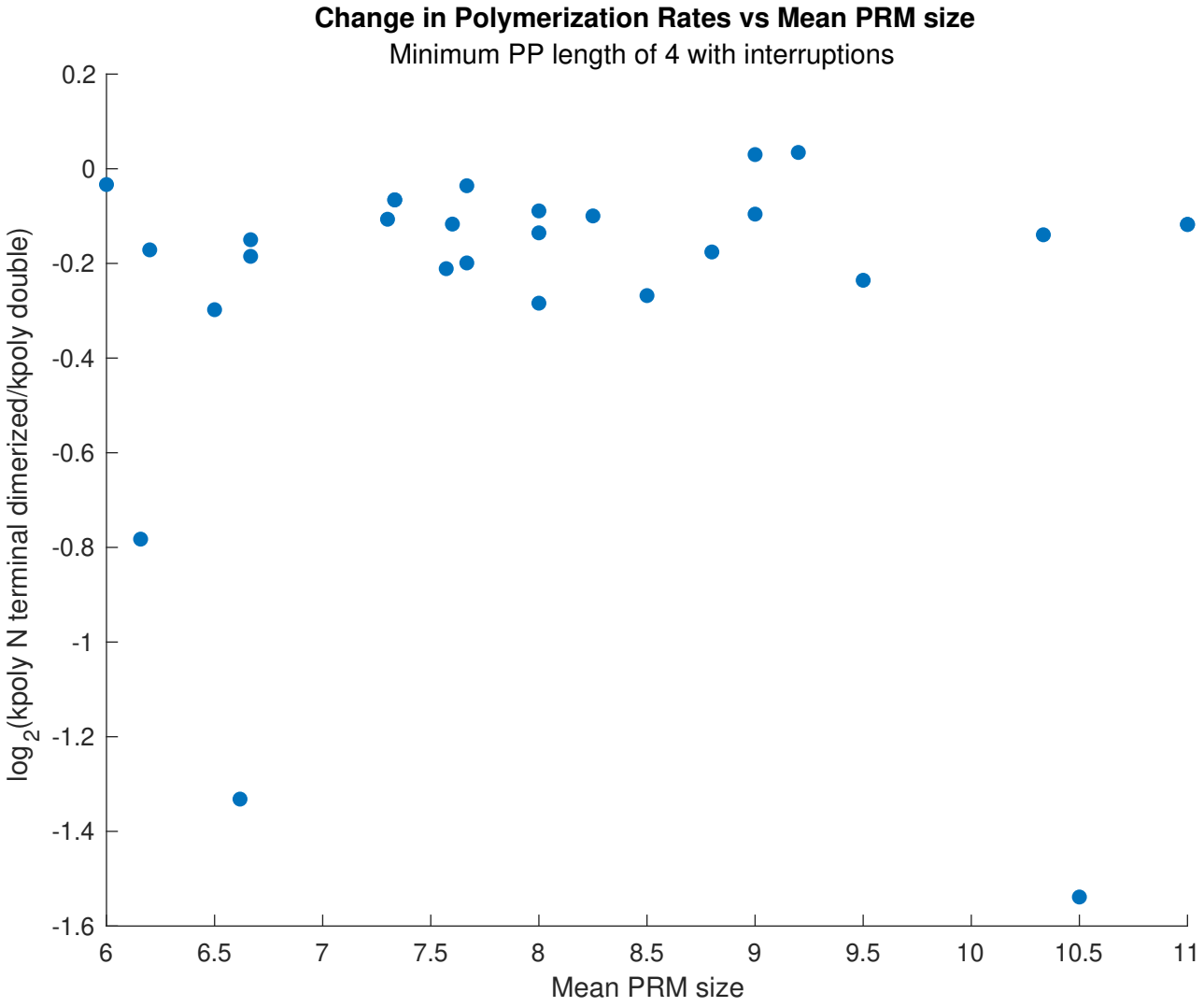

Number of Binding Sites per Formin
Minimum PP length of 4 with interruptions
Binding sites
0
5
10
15
20
25
30
35
Diap1--Human
Diap2--Human
Diap3--Human
Diap1--Mouse
Diap2--Mouse
Diap3--Mouse
Diap1--Rat
Diap3--Rat
DAAM1--Human
DAAM2--Human
DAAM1--Mouse
DAAM2--Mouse
CAPU--FruitFly
FMN1--Human
FMN2--Human
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

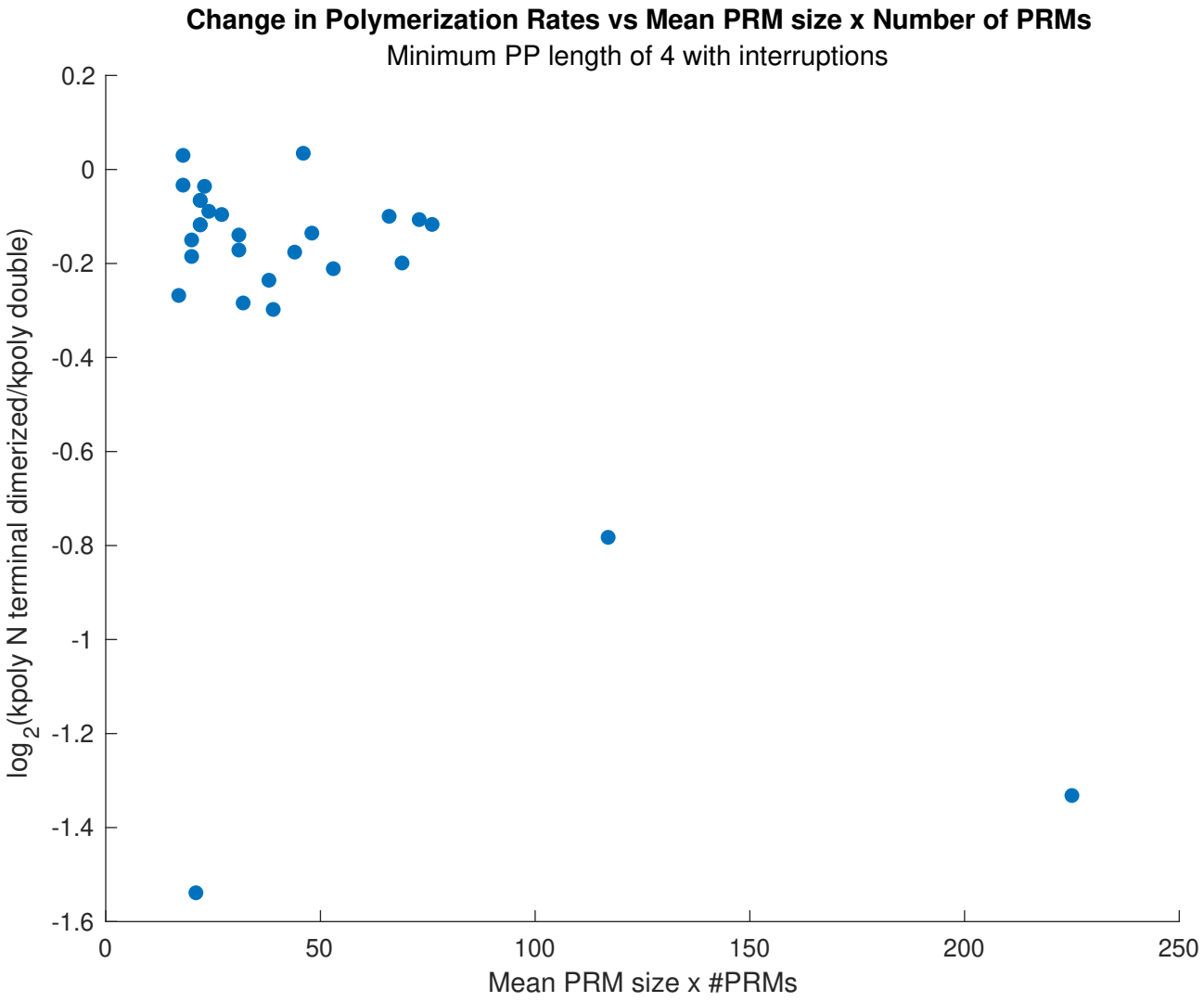

Change in Polymerization Rates vs Number of PRMs
Minimum PP length of 4 with interruptions
log2(kpoly N terminal dimerized/kpoly double)
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
-1.2
-1.4
-1.6
0
5
10
15
20
25
30
35
Number of PRMs

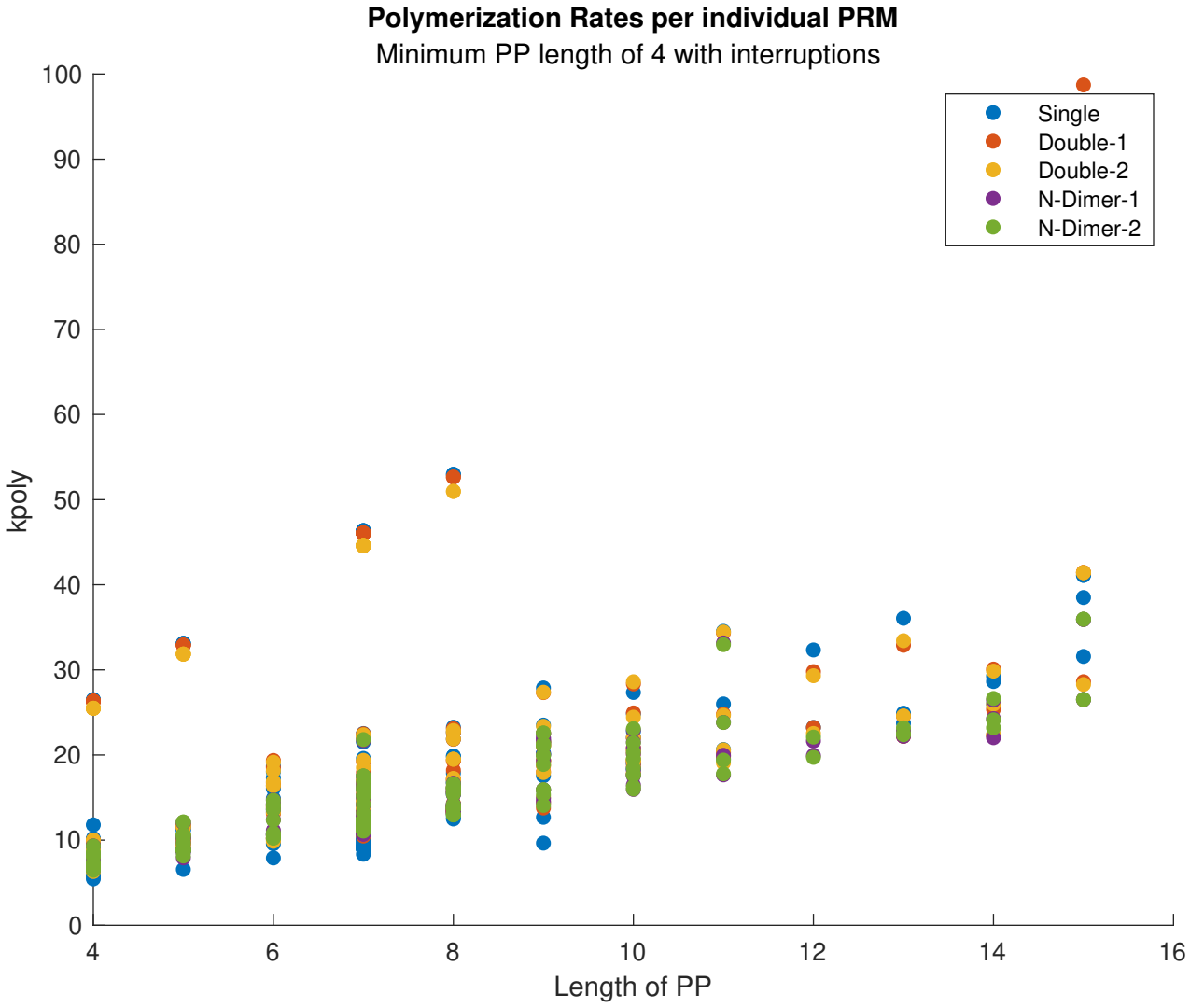

Polymerization Rates vs Number of PRMs
Minimum PP length of 4 with interruptions
Single
Double
N-Dimer
kpoly
Number of PRMs
11
10
9
8
7
6
5
0
5
10
15
20
25
30
35


Change in Polymerization Rates vs Length of FH1 Domain
Minimum PP length of 4 with 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
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 4 with interruptions
Single
Double
N-Dimer
kpoly
Length of FH1 domain (1st PRM to FH2)
11
10
9
8
7
6
5
0
100
200
300
400
500
600


Change in Polymerization Rates vs Mean PRM size
Minimum PP length of 4 with 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
6
6.5
7
7.5
8
8.5
9
9.5
10
10.5
11
Mean PRM size


Change in Polymerization Rates vs Mean PRM size x Number of PRMs
Minimum PP length of 4 with interruptions
log2(kpoly N terminal dimerized/kpoly double)
Mean PRM size x #PRMs
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
-1.2
-1.4
-1.6
0
50
100
150
200
250


Polymerization Rates per individual PRM
Minimum PP length of 4 with interruptions
Single
Double-1
Double-2
N-Dimer-1
N-Dimer-2
kpoly
Length of PP
0
10
20
30
40
50
60
70
80
90
100
4
6
8
10
12
14
16