Uncropped membarane images. Surrounded area are used for Main Figure 2.

Lane
1: GST Sample #1   6: GJA1-20k Sample #3
2: GJA1-20k Sample #1   7: GST Sample #4
3: GST Sample #2   8: GJA1-20k Sample #4
4: GJA1-20k Sample #2   9: GST Sample #5
5: GST Sample #3   10: GJA1-20k Sample #5

Same order in all membrane

Ladder
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

Actin

97 —
64 —
51 —
39 —
28 —
14 —

MEK1/2

97 —
64 —
51 —
39 —

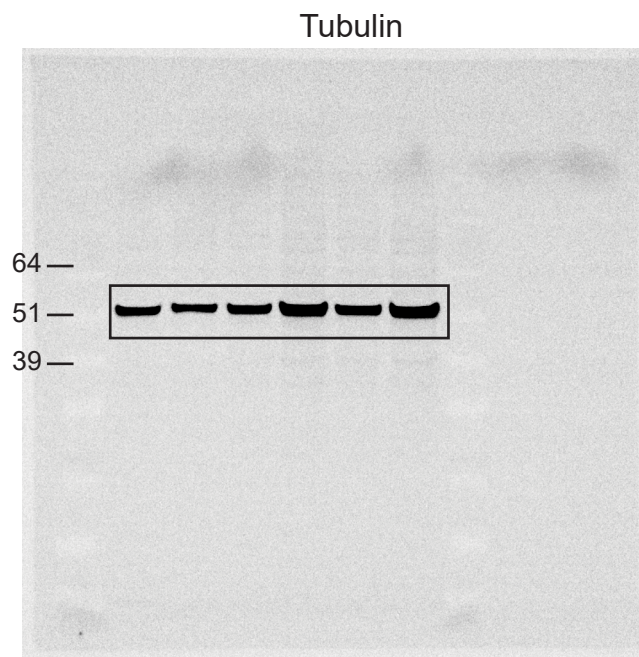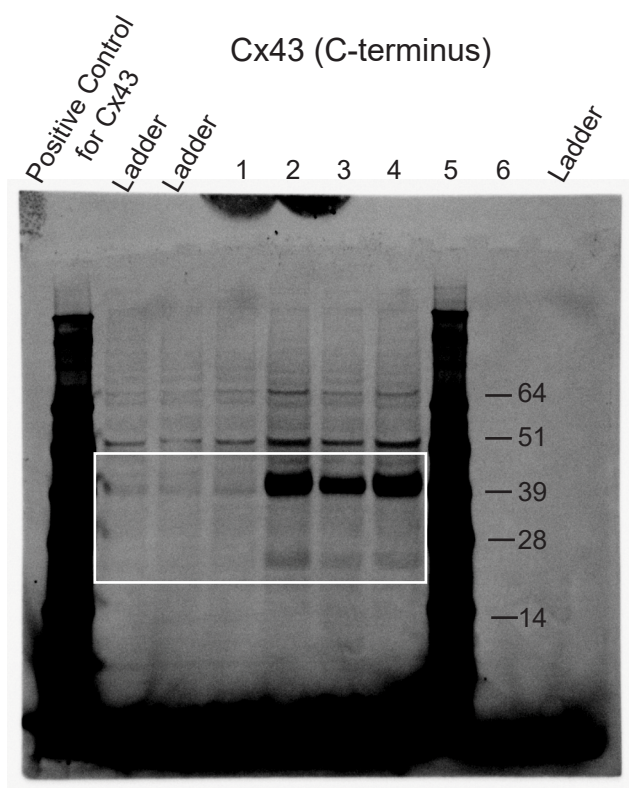**COX IV**

28 —
14 —

Tom20

97 —
64 —
51 —
39 —
28 —
14 —

Lane
  1: GST Sample #1 (Cytosol)
  2: GJA1-20k Sample #1 (Cytosol)
  3: GST Sample #2 (Cytosol)
  4: GJA1-20k Sample #2 (Cytosol)
  5: GST Sample #3 (Cytosol)
  6: GJA1-20k Sample #3 (Cytosol)
  7: GST Sample #4 (Cytosol)
  8: GJA1-20k Sample #4 (Cytosol)
  9: GST Sample #1 (Mitochondria)
  10: GJA1-20k Sample #1 (Mitochondria)
  11: GST Sample #2 (Mitochondria)
  12: GJA1-20k Sample #2 (Mitochondria)
  13: GST Sample #3 (Mitochondria)
  14: GJA1-20k Sample #3 (Mitochondria)
  15: GST Sample #4 (Mitochondria)
  16: GJA1-20k Sample #4 (Mitochondria)

Same order in all membrane

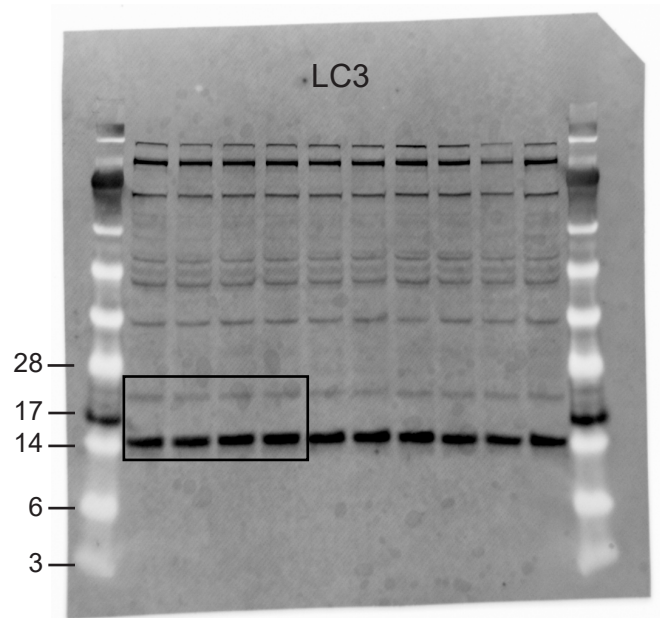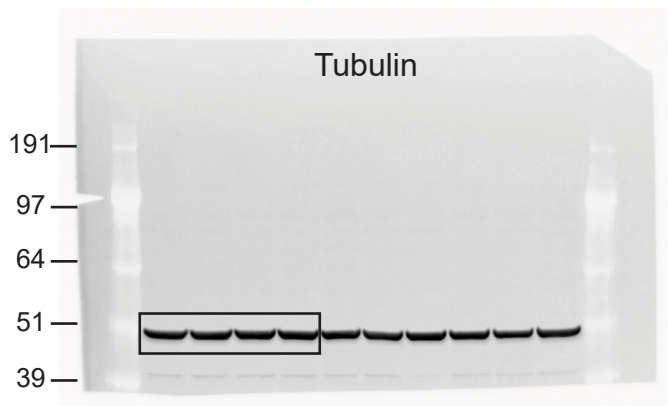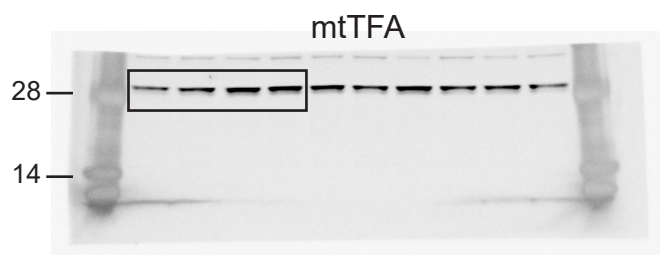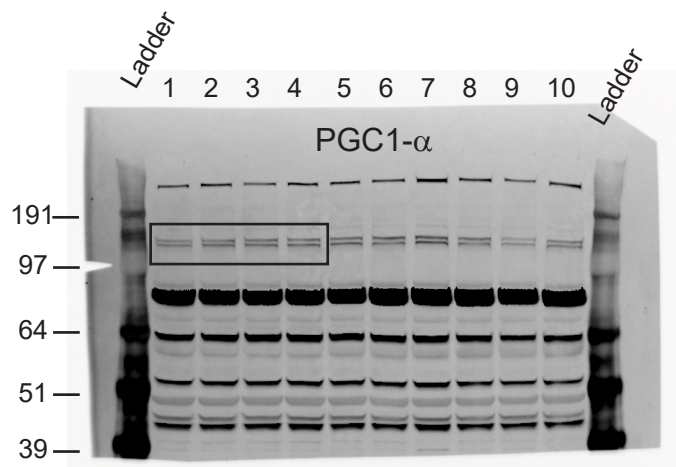Uncropped membarane images. Surrounded area are used for Main Figure 3.

Cx43 (C-terminus)

Positive Control for Cx43 | Ladder | Ladder | 1 | 2 | 3 | 4 | 5 | 6 | Ladder

— 64
— 51
— 39
— 28
— 14

Tubulin

64 —
51 —
39 —

Lane
1: Gja1 siRNA Sample #1
2: Gja1 siRNA Sample #2
3: Gja1 siRNA Sample #3
4: Control siRNA Sample #1
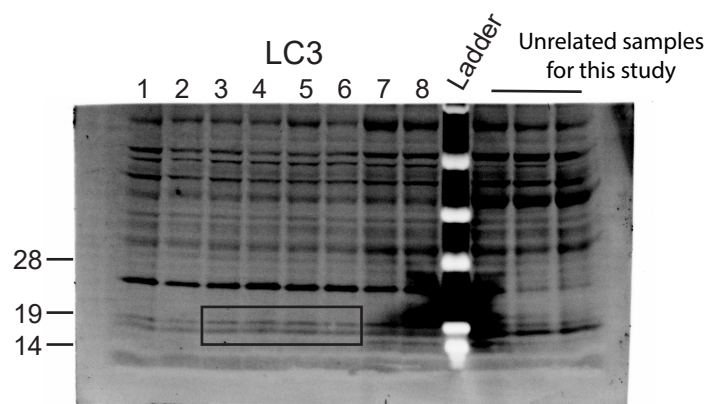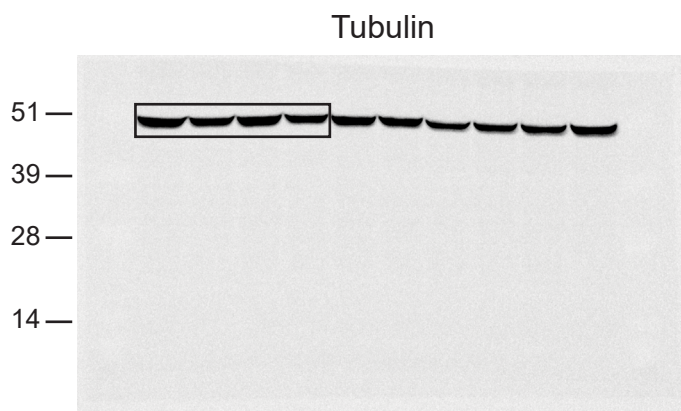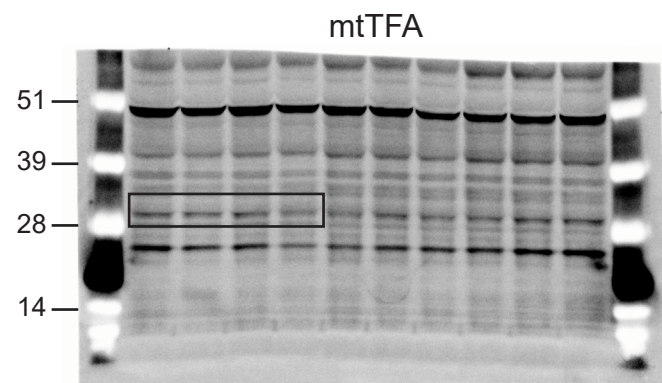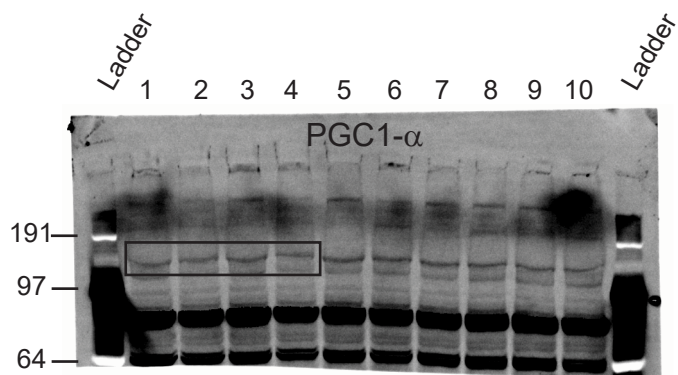5: Control siRNA Sample #2
6: Control siRNA Sample #3

Same order in all membrane

Uncropped membarane images. Surrounded area are used for Figure 1—figure supplement 1.

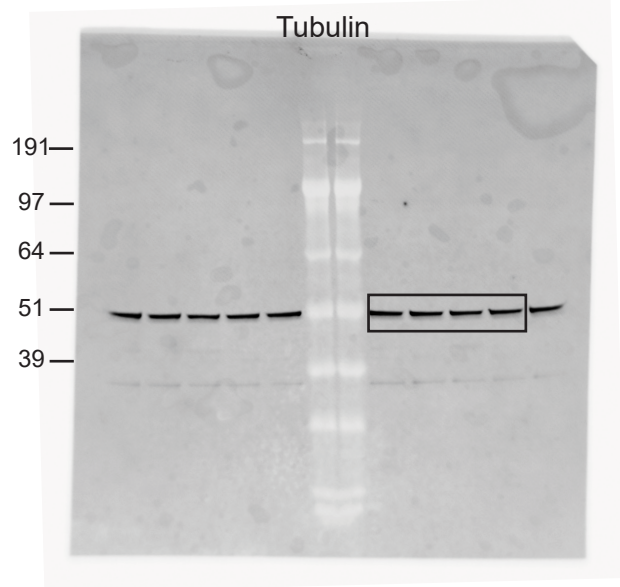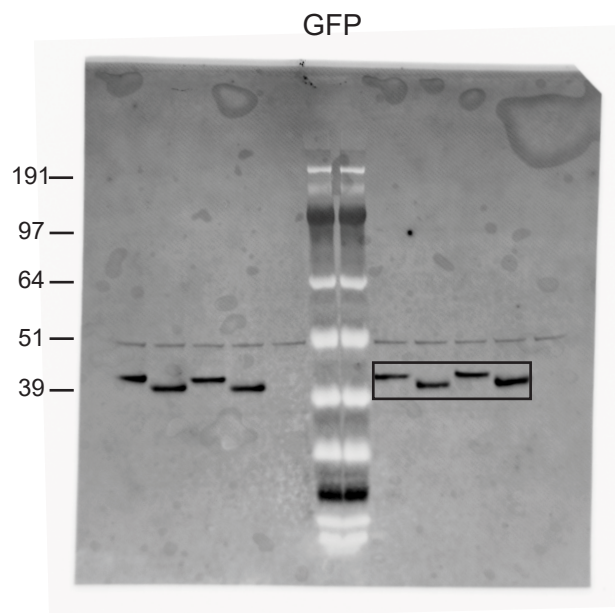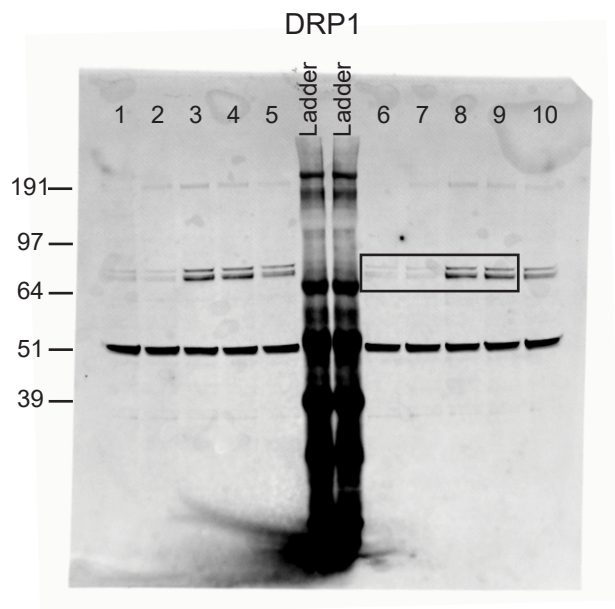Uncropped membarane images. Surrounded area are used for Figure1—figure supplement 2.

DRP1

191—
97 —
64 —
51 —
39 —

1 2 3 4 5 Ladder Ladder 6 7 8 9 10

GFP

191—
97 —
64 —
51 —
39 —

Tubulin

191—
97 —
64 —
51 —
39 —

Lane
1: GST + DRP1 siRNA Sample #1
2: GJA1-20k + DRP1 siRNA Sample #1
3: GST + Control siRNA Sample #1
4: GJA1-20k + Control siRNA Sample #1
5: Blank Control (no transfection, no siRNA)
6: GST + DRP1 siRNA Sample #2
7: GJA1-20k + DRP1 siRNA Sample #2
8: GST + Control siRNA Sample #2
9: GJA1-20k + Control siRNA Sample #2
10: Blank Control (no transfection, no siRNA)

Same order in all membrane

Dynamin 2

Ladder 1 2 3 4 5 6 7 8 9 10 11 12

Tubulin

1 2 3 4 5 6 7 8 9 10 11 12
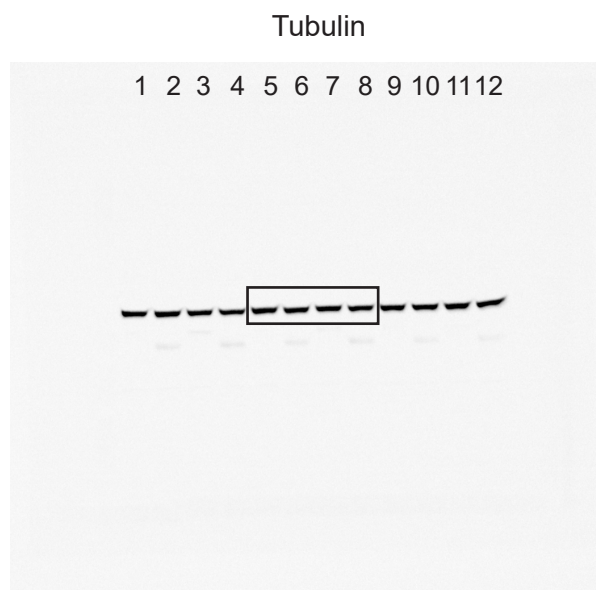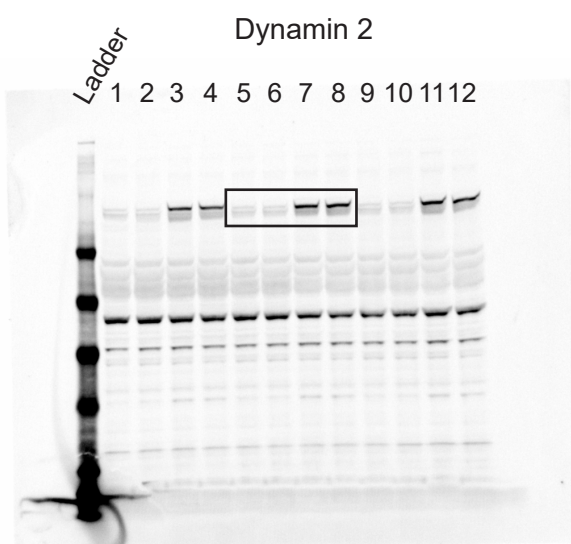
Lane
1: GST + DNM2 siRNA Sample #1
2: GJA1-20k + DNM2 siRNA Sample #1
3: GST + Control siRNA Sample #1
4: GJA1-20k + Control siRNA Sample #1

5: GST + DNM2 siRNA Sample #2
6: GJA1-20k + DNM2 siRNA Sample #2
7: GST + Control siRNA Sample #2
8: GJA1-20k + Control siRNA Sample #2

9: GST + DNM2 siRNA Sample #3
10: GJA1-20k + DNM2 siRNA Sample #3
11: GST + Control siRNA Sample #3
12: GJA1-20k + Control siRNA Sample #3

Uncropped membarane images. Surrounded area are used for Figure 2—figure supplement 1.