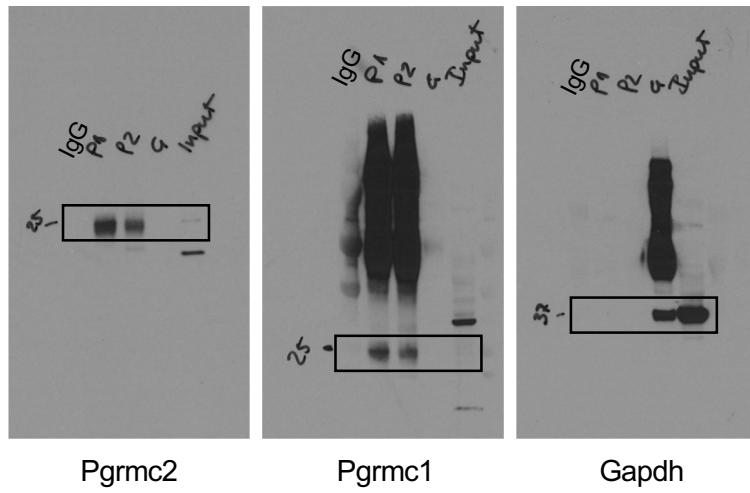
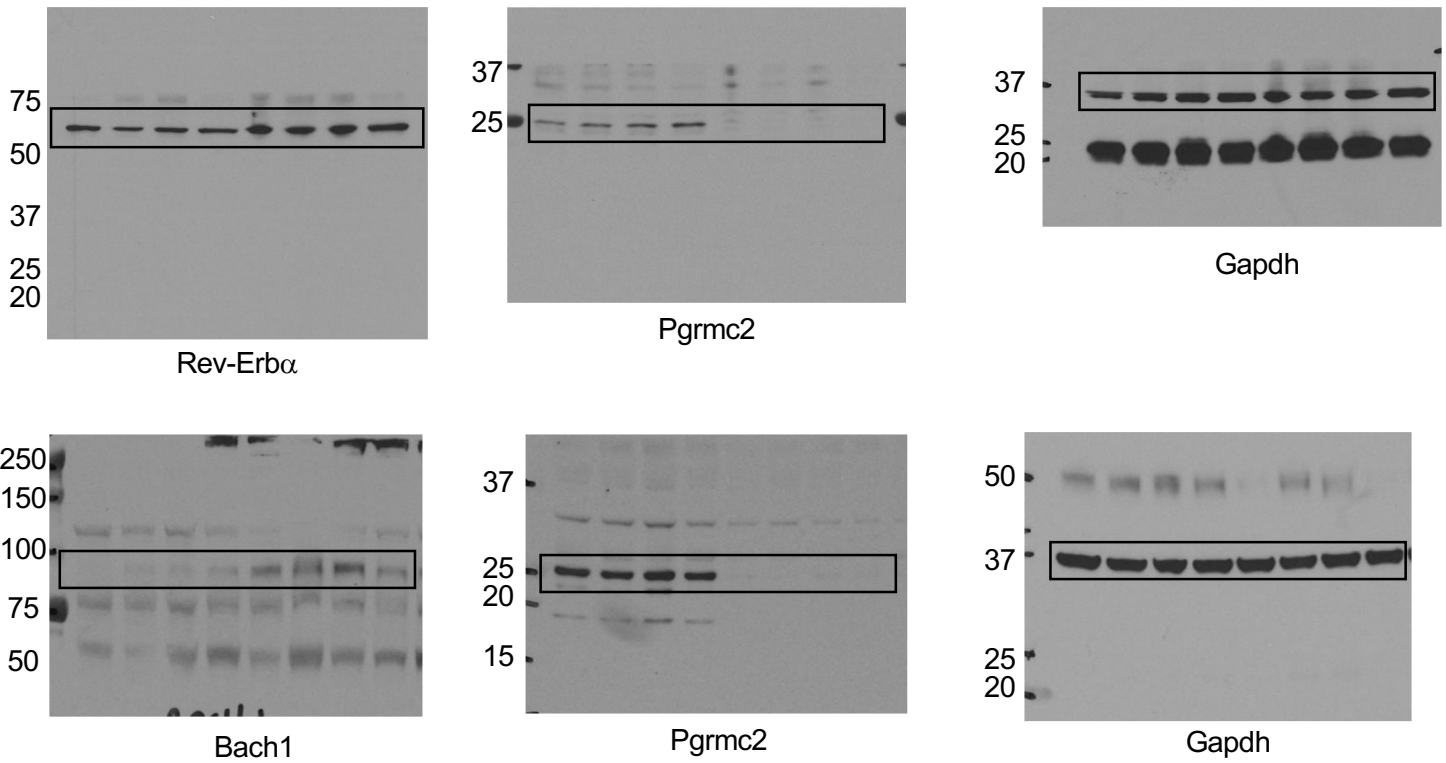


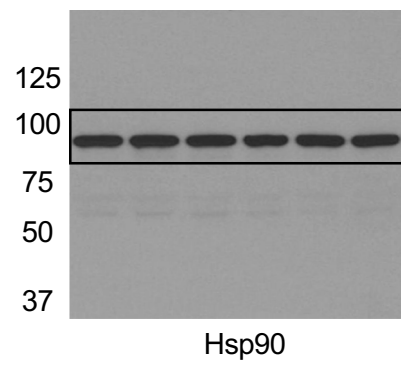
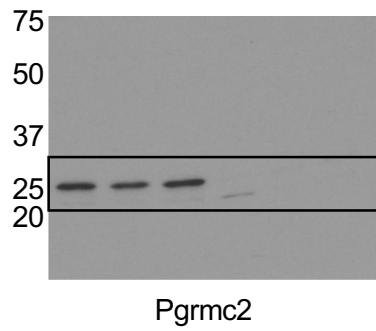
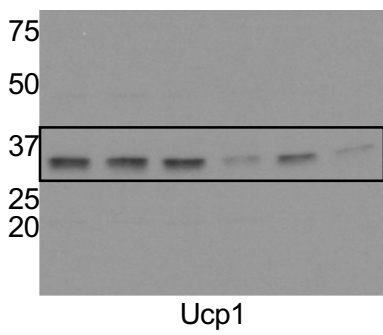
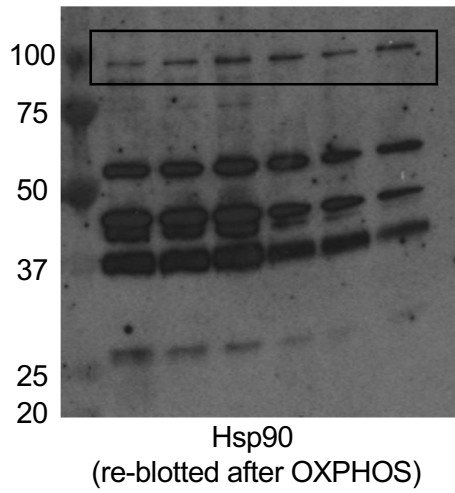
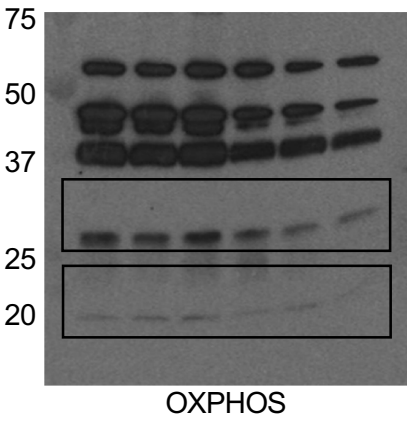
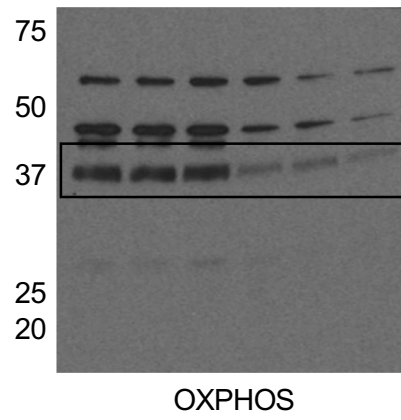
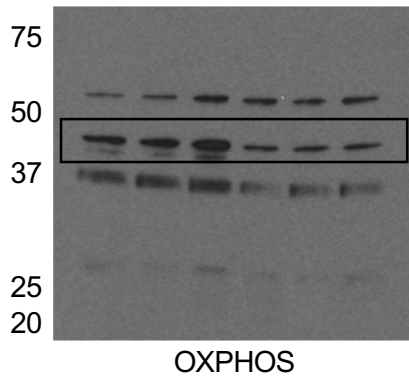
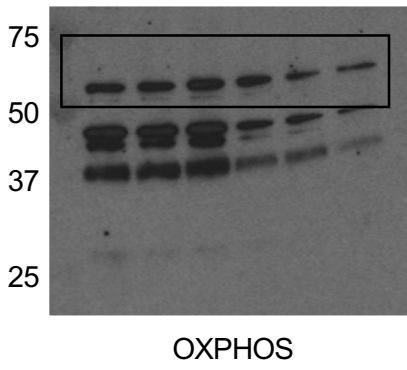
# Uncropped blots from Figure 1



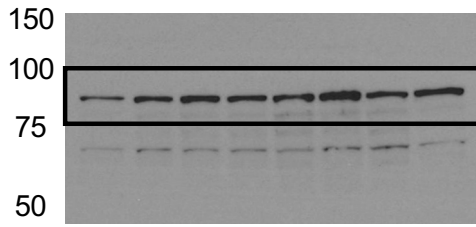
# Uncropped blots from Figure 3



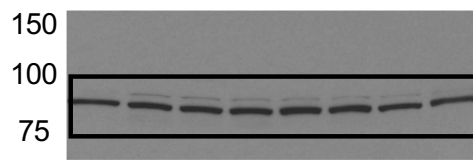
# Uncropped blots from Figure 3



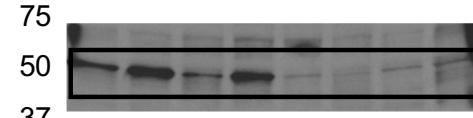
# Uncropped blots from Figure 4



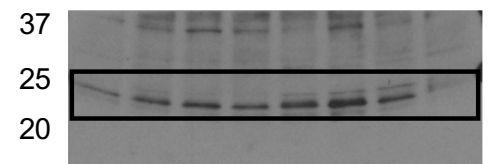
Hsp90



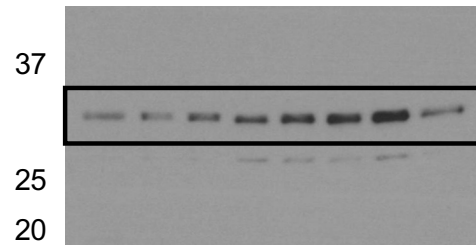
Hsp90



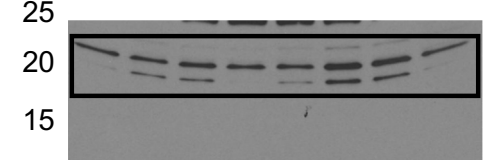
Rev-Erb $\alpha$



Pgrmc2

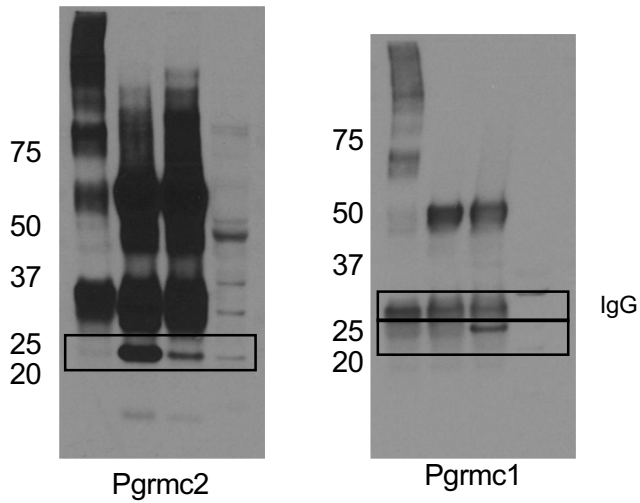


Ucp1

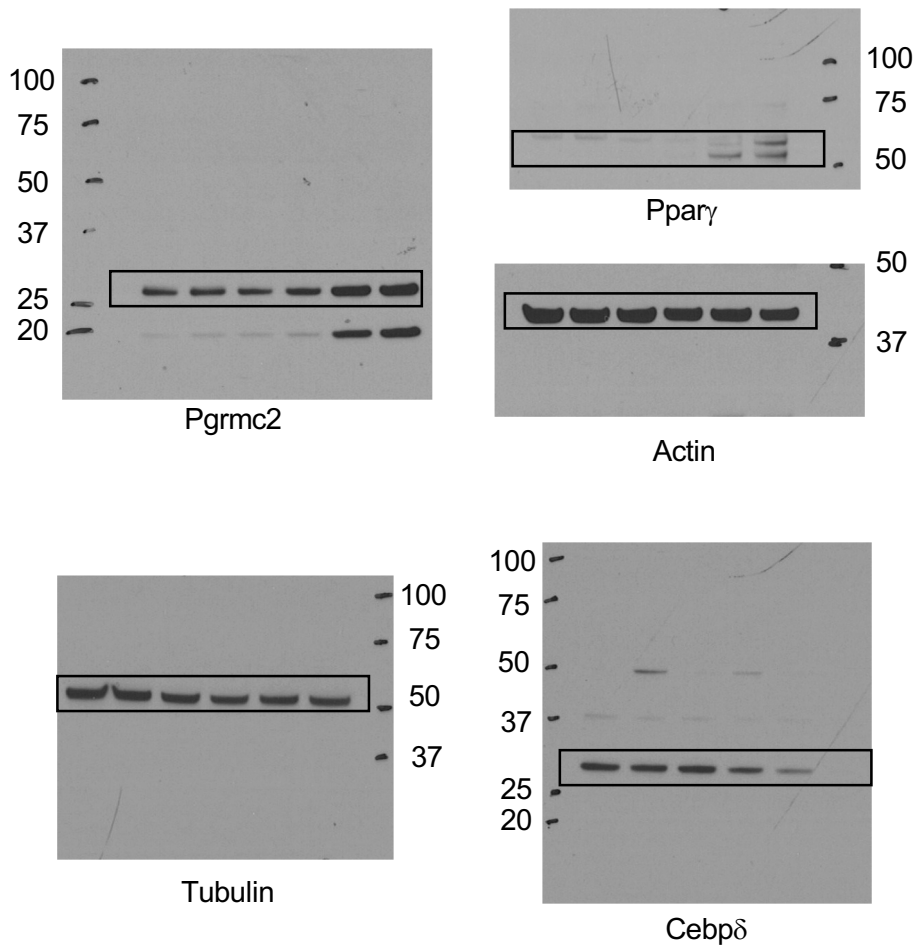


Pgrmc1

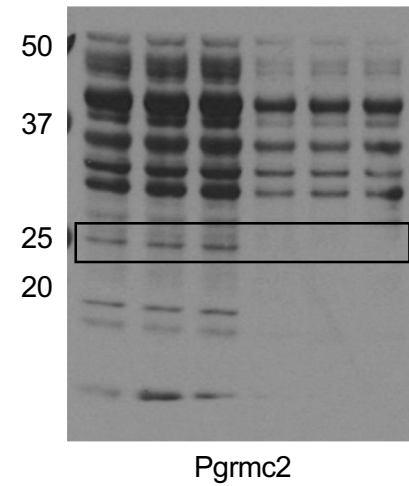
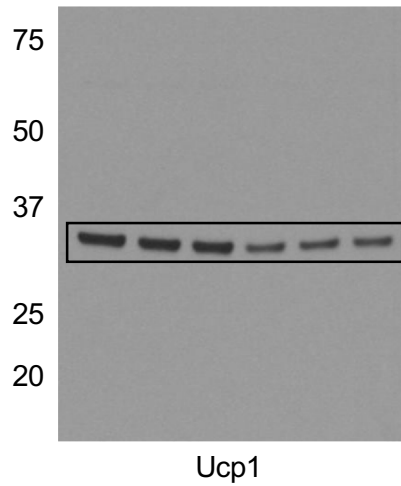
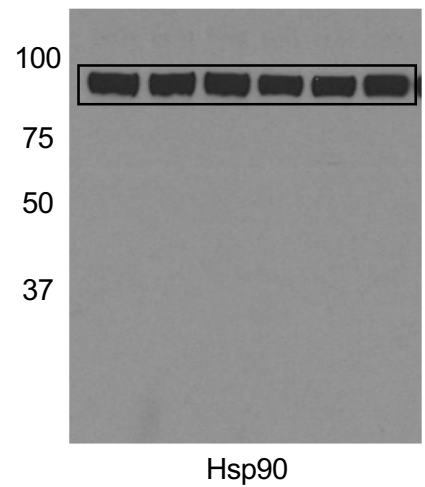
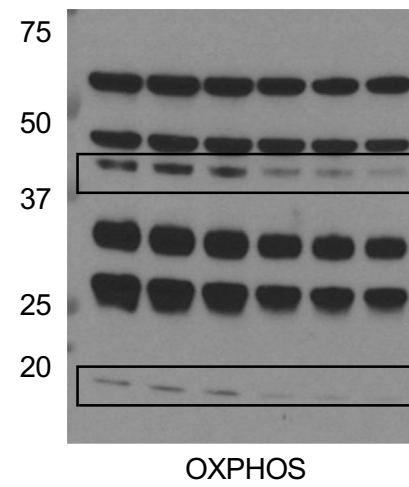
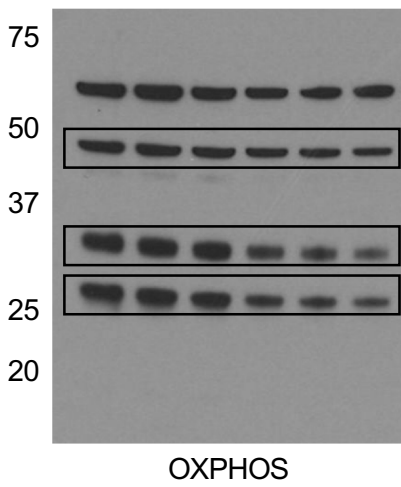
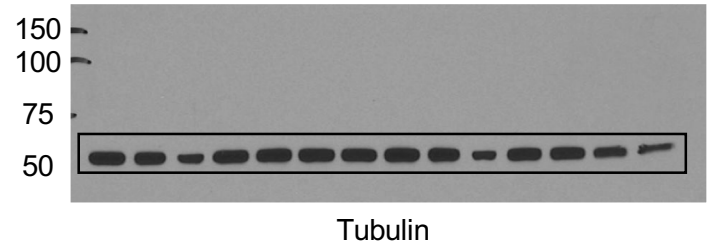
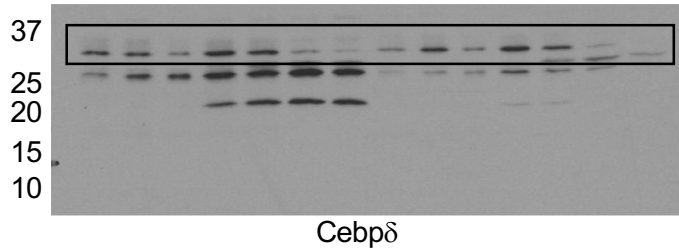
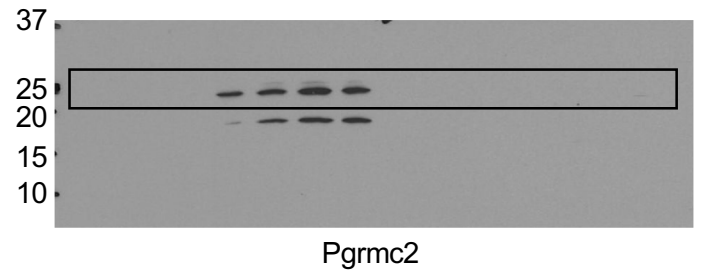
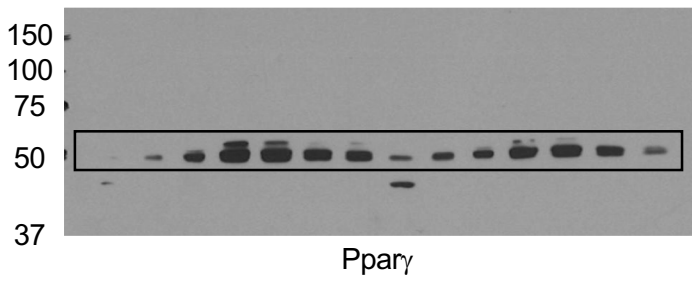
## Uncropped blots from Extended Data Figure 1



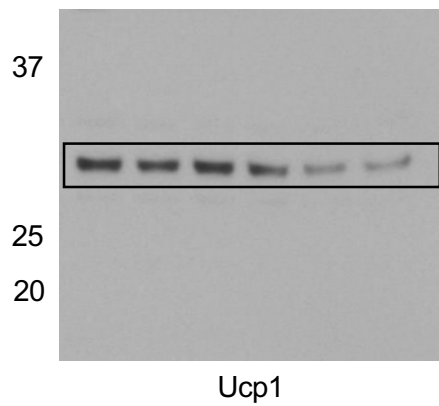
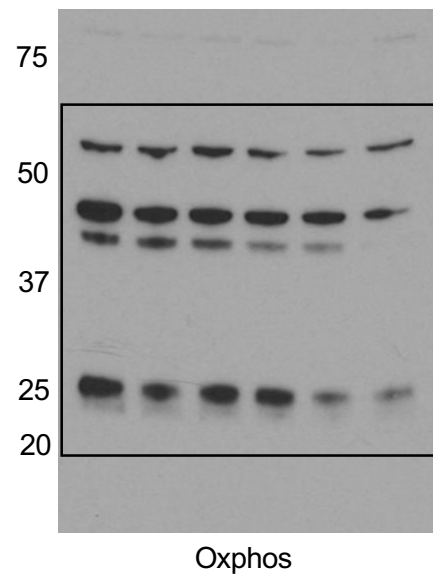
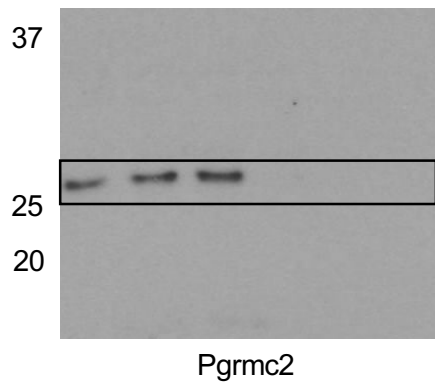
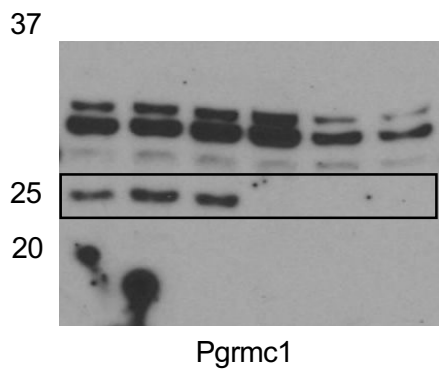
## Uncropped blots from Extended Data Figure 2



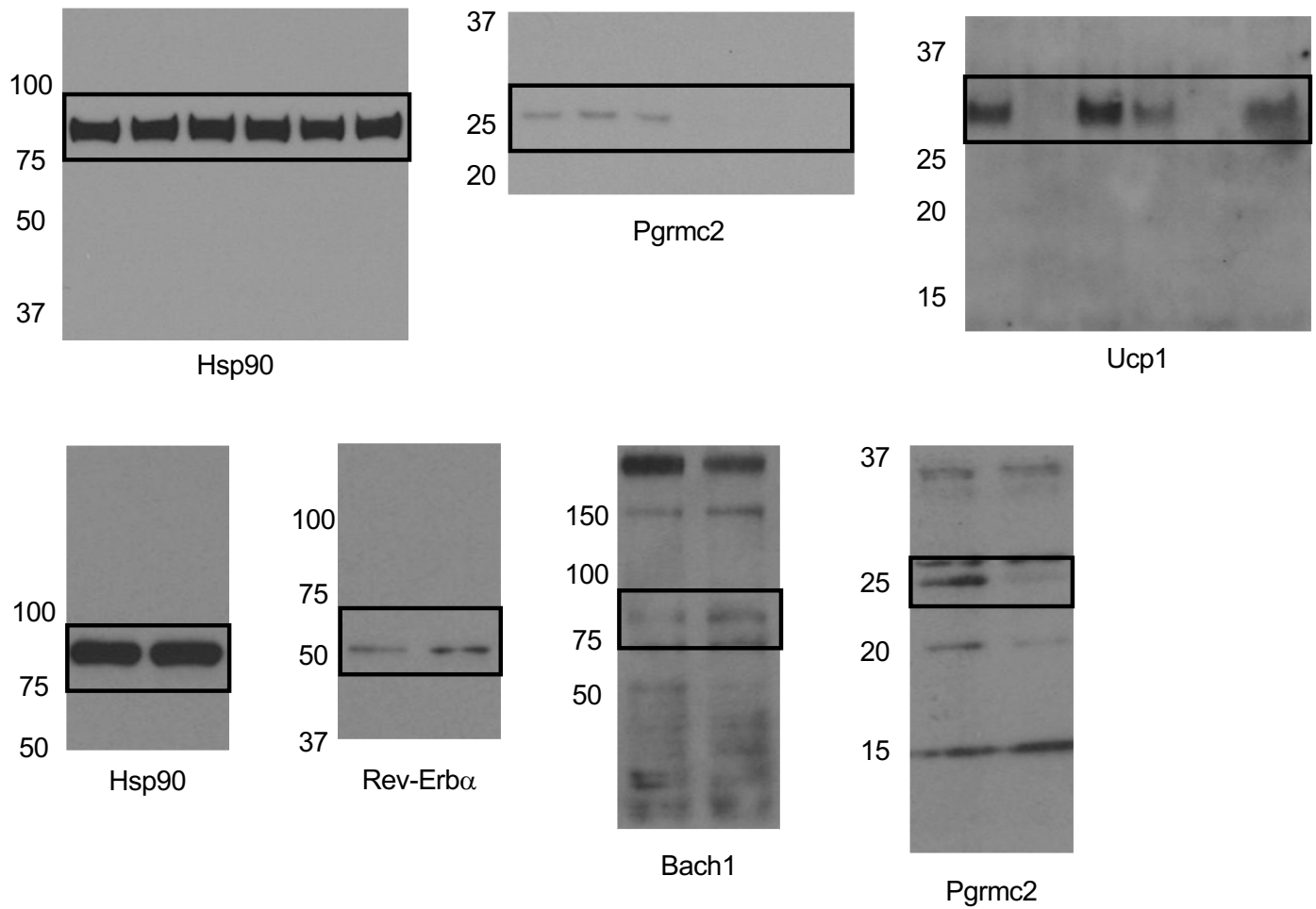
# Uncropped blots from Extended Data Figure 4



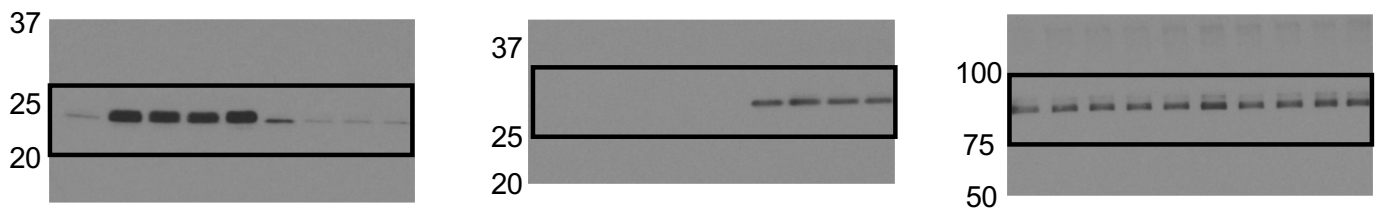
# Uncropped blots from Extended Data Figure 4



## Uncropped blots from Extended Data Figure 5



## Uncropped blots from Extended Data Figure 9



| Gene                             |         | Primers                         |
|----------------------------------|---------|---------------------------------|
| <i>Pgrmc2</i>                    | Forward | TGCAAATGGAGAGTGTTTCGAG          |
|                                  | Reverse | TCCTGTTTACTGTGATCCTTGG          |
|                                  | Probe   | TGTA CTCTGATGGCTCCTCCCCT        |
| 36B4                             | Forward | AGATGCAGCAGATCCGCAT             |
|                                  | Reverse | GTTCTTGCCCATCAGCACC             |
|                                  | Probe   | CGCTCCGAGGGAAGGCCG              |
| <i>Fabp4</i>                     | Forward | GGCGTGGAATTCGATGAA              |
|                                  | Reverse | GCTTGTCACCATCTCGTT              |
|                                  | Probe   | TGATGCTCTTCACCTTCCTGTCGT        |
| <i>Gadd45<math>\gamma</math></i> | Forward | GGCCAGGATACAGTTCCG              |
|                                  | Reverse | TTGTCAGGGTCCACATTCAG            |
|                                  | Probe   | AAGTTCGTGCAGTGCTTTCCC           |
| <i>Acadm</i>                     | Forward | ACCCAGATCCTAAAGTACCC            |
|                                  | Reverse | CGAAAGCAATTCCTCTGGTG            |
|                                  | Probe   | TGGCCCATGTTTAGTTCTTTTTTCCAA     |
| <i>Ppargc1a</i>                  | Forward | CATTTGATGCACTGACAGATGGA         |
|                                  | Reverse | GTCAGGCATGGAGGAAGGAC            |
|                                  | Probe   | CCGTGACCACTGACA ACGAGGCC        |
| <i>Pck1</i>                      | Forward | TTGAACTGACAGACTCGCCCT           |
|                                  | Reverse | TGCCCATCCGAGTCATGA              |
|                                  | Probe   | CCGCATGCTGGCCACCAC              |
| <i>Tfam</i>                      | Forward | CACCCAGATGCAAACTTTTCAG          |
|                                  | Reverse | CTGCTCTTTATACTTGCTCACAG         |
|                                  | Probe   | CCACAGGGCTGCAATTTTCCTAACC       |
| <i>Slc2a4</i>                    | Forward | TGTCGCTGGTTTCTCCA ACTG          |
|                                  | Reverse | CCATACGATCCGCAACATACTG          |
|                                  | Probe   | ACCTGTA ACTTCATTGTCTGGCATGGGTTT |
| <i>Cd36</i>                      | Forward | GCGACATGATTAATGGCACAG           |
|                                  | Reverse | GATCCGAACACAGCGTAGATAG          |
|                                  | Probe   | CAACAAAAGGTGGAAAGGAGGCTGC       |



| Gene          |         | Primers                      |
|---------------|---------|------------------------------|
| <i>Pparg</i>  | Forward | TGTTATGGGTGAAACTCTGGG        |
|               | Reverse | TCTTGTGAAGTGCTCATAGGC        |
|               | Probe   | CCATGCTCTGGGTCAACAGGAGAAT    |
| <i>Acrp30</i> | Forward | AGGCATCCCAGGACATC            |
|               | Reverse | CCTGTCATTCCAACATCTCC         |
|               | Probe   | CCTTAGGACCAAGAAGACCTGCATCTC  |
| <i>Ucp1</i>   | Forward | GAGCTGGTAACATATGACCTC        |
|               | Reverse | GAGCTGACAGTAAATGGCA          |
|               | Probe   | ACAAAATACTGGCAGATGACGTCCC    |
| <i>Cidea</i>  | Forward | CACGCATTTTCATGATCTTGG        |
|               | Reverse | CCTGTATAGGTCTGAAGGTGA        |
|               | Probe   | TTACTACCCGGTGTCCATTTCTGTCC   |
| <i>Dio2</i>   | Forward | CTGTGTCTGGAACAGCTT           |
|               | Reverse | CACTGGAATTGGGAGCAT           |
|               | Probe   | CTAGATGCCTACAACAGGTAAACTGGGT |
| <i>Pdk4</i>   | Forward | AGTGACTCAAAGACGGGAAAC        |
|               | Reverse | GTGTGAGGTTTAATTCTGGCG        |
|               | Probe   | ATCGACCCAAACTGTGATGTGGTAGC   |
| <i>Hmox1</i>  | Forward | ACAGAGGAACACAAAGACCAG        |
|               | Reverse | GTGTCTGGGATGAGCTAGTG         |
|               | Probe   | CCTCACAGATGGCGTCACTTCGTC     |
| <i>Bmal1</i>  | Forward | ACCAACCCATACACAGAAGC         |
|               | Reverse | GACAGACTCGGAGACAAAGAG        |
|               | Probe   | TCCCTCGGTCACATCCTACGACA      |
| <i>Fth1</i>   | Forward | TCAACCGCCAGATCAACC           |
|               | Reverse | TCAGTTTCTCGGCATGCTC          |
|               | Probe   | AGTTCTTCAGAGCCACATCATCTCGG   |
| <i>Bach1</i>  | Forward | ATCCATGACATCCGCAGAAG         |
|               | Reverse | GAATGTGGTCTCGCTCCTTC         |
|               | Probe   | ACTTTGCAGCTTCTCGATTTCGACT    |

| Gene                               |         | Primers                      |
|------------------------------------|---------|------------------------------|
| <i>Alas2</i>                       | Forward | TTTAGTATTGGACGCTGCCC         |
|                                    | Reverse | CTTCCTGTCTTGGAGTTCTGAC       |
|                                    | Probe   | AGCCTTGGTTGCCTTAAGATGGATTTGA |
| <i>Adrb3</i>                       | ABI mix | Mm02601819_g1                |
| <i>G6pc</i>                        | ABI mix | Mm00839363_m1                |
| <i>Gck</i>                         | ABI mix | Mm00439129_m1                |
| <i>Per2</i>                        | ABI mix | Mm00478099_m1                |
| <i>Per3</i>                        | ABI mix | Mm00478120_m1                |
| <i>Dbp</i>                         | ABI mix | Mm00497539_m1                |
| <i>Npas2</i>                       | ABI mix | Mm00500848_m1                |
| <i>Rev-Erb <math>\alpha</math></i> | ABI mix | Mm00520708_m1                |
| <i>Rev-Erb <math>\beta</math></i>  | ABI mix | Mm01310356_g1                |
| <i>Dtx4</i>                        | ABI mix | Mm00549843_m1                |
| <i>Alas1</i>                       | ABI mix | Mm01235914_m1                |