

SUPPLEMENTAL MATERIAL

SUPPLEMENTAL MATERIALS & METHODS

Real Time PCR Primers

Cad-F – AACTGCGTAGGCTTCGACCATAACA
 Cad-R – AATCAATGCGGGTGAGCTCGTAGA

Gls [1]
 GlS-F – TTCGCCCTCGGAGATCCTAC
 GlS-R – CCAAGCTAGGTAACAGACCCT

Hk2 [2]
 Hk2-F – TGATCGCCTGCTTATTCACGG
 Hk2-R – AACCGCCTAGAAATCTCCAGA

Ncl-F – ACTGGAAAGACCAGCACTTGGAGT
 Ncl-R – CCCTTTAGGTTTGCCATGTGGGTT

Odc-F – GCATGTGGGTGATTGGATGCTGTT
 Odc-R – TTGCCACATTGGCCGTGACATTAC

Pcg1a-F – GGATGAATACCGCAAAGAGC
 Pcg1a-R – GGTAGGTGATGAAACCATAGC

Pcg1b [3]
 Pcg1b-F – TCCTGTAAAAGCCCGGAGTAT
 Pcg1b-R – GCTCTGGTAGGGGCAGTGA

Sirt1 [4]
 Sirt1-F – ACCTCCCAGACCCTCAAGC
 Sirt1-R – TTCCTTCCTTATCTGACAAAGC

SUPPLEMENTAL REFERENCES

- 1 Hettmer, S., A. C. Schinzel, D. Tchessalova, M. Schneider, C. L. Parker, R. T. Bronson, N. G. Richards, W. C. Hahn and A. J. Wagers. Functional genomic screening reveals asparagine dependence as a metabolic vulnerability in sarcoma. *Elife*. 2015; 4.

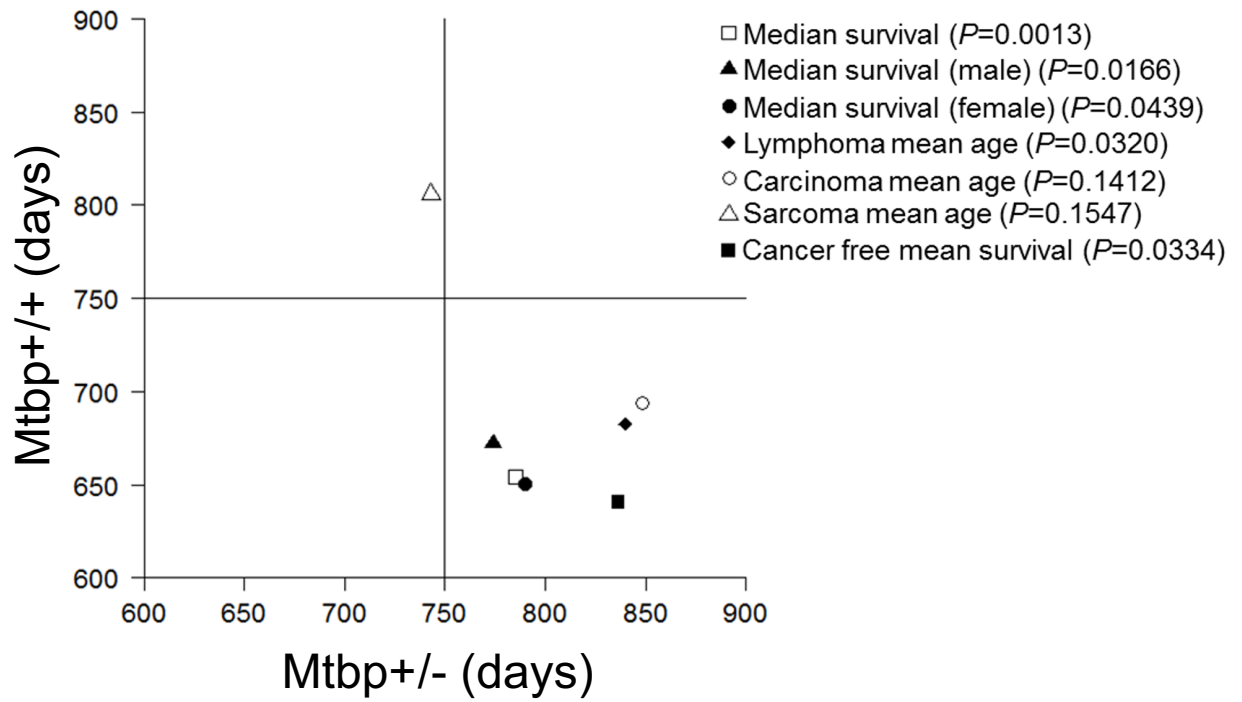
- 2 Shi, L. Z., R. Wang, G. Huang, P. Vogel, G. Neale, D. R. Green and H. Chi. HIF1alpha-dependent glycolytic pathway orchestrates a metabolic checkpoint for the differentiation of TH17 and Treg cells. *J Exp Med.* 2011; 208: 1367-1376.
- 3 Walkey, C. J. and B. M. Spiegelman. A functional peroxisome proliferator-activated receptor-gamma ligand-binding domain is not required for adipogenesis. *J Biol Chem.* 2008; 283: 24290-24294.
- 4 Saini, A., N. Al-Shanti, A. P. Sharples and C. E. Stewart. Sirtuin 1 regulates skeletal myoblast survival and enhances differentiation in the presence of resveratrol. *Exp Physiol.* 2012; 97: 400-418.

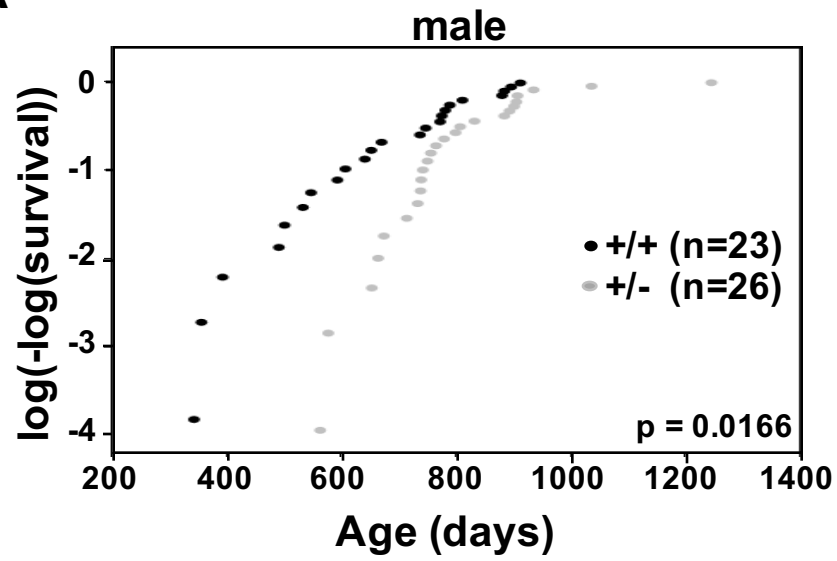
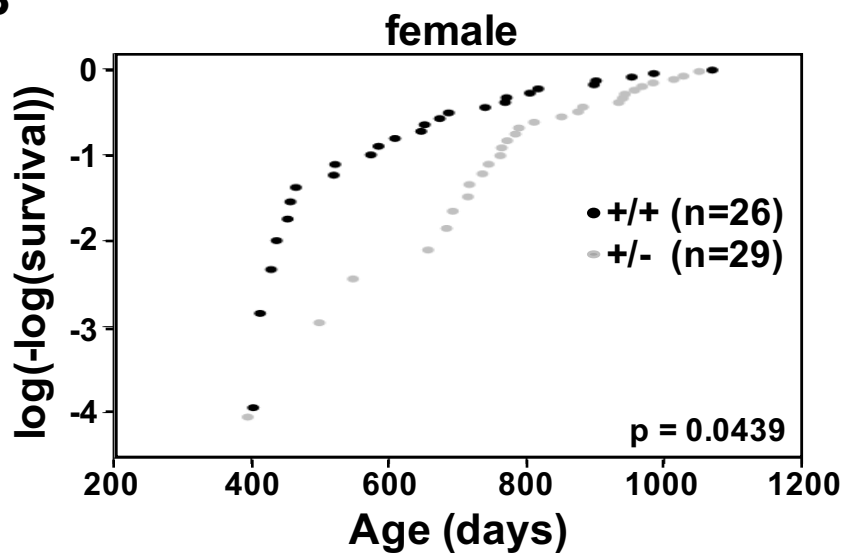
SUPPLEMENTAL FIGURE LEGENDS

Figure S1. Indicators of increased longevity in *Mtbp*^{+/-} mice. Ages of the events indicated in the key for *Mtbp*^{+/-} mice compared to littermate matched *Mtbp*^{+/+} mice plotted. P values determined by student's t-tests.

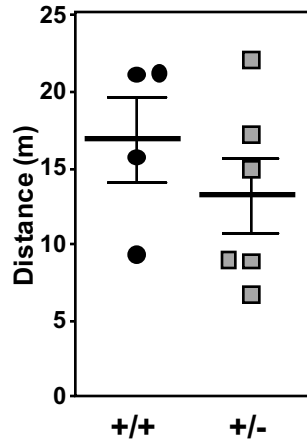
Figure S2. Male and female *Mtbp* heterozygous mice have a decreased instantaneous death rate. Instantaneous death rate plotted for males (A, log-rank $P = 0.0166$, Chi-sq=5.74, df=1) and females (B, log-rank $P = 0.0439$, Chi-sq=4.06, df=1). The number of mice in each group denoted by n.

Figure S3. *Mtbp* heterozygosity does not significantly alter locomotor activity in young mice. A) Six month-old *Mtbp*^{+/+} (+/+; circle) and *Mtbp*^{+/-} (+/-; square) mice were placed in an open field cage and the total distance traveled in one hour was recorded using a laser grid and averaged for two consecutive days ($p = 0.1772$). B) After two days of training, the time +/+ and +/- mice spent on an accelerating rota-rod recorded and averaged from three consecutive trials separated by 10 minutes of rest ($p = 0.3359$). P values calculated with student's t-tests. Error bars represent standard error of the mean.



A**B**

A



B

