Supporting Information

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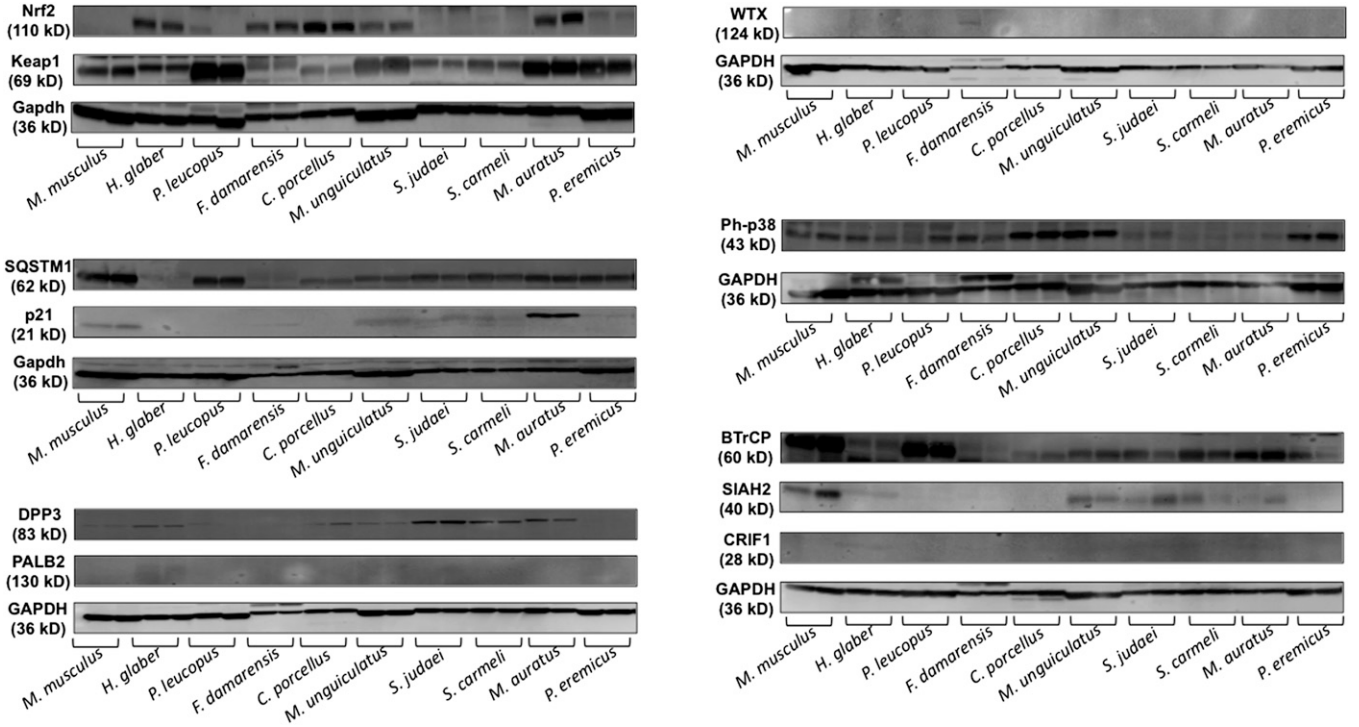

Fig. S1. Proteins measured by Immunoblot in rodent species with varying MLSPs. We analyzed 11 different proteins, including Nrf2, Keap1, SQSTM1/p62, p21, DPP3, PALB2, WTX, Phospho-p38, βTrCP, SIAH2, and CRIF1, all of which have been shown to influence Nrf2-signaling activity, in 10 different rodent species via Immunoblotting ($n = 4$ per species). Blots presented here are representative of all Immunoblotting performed. All proteins were normalized to GAPDH, and sizes of the bands quantified for each protein are found next to each blot. Significant correlations with MLSP were observed between Keap1, SQSTM1/p62, and βTrCP.

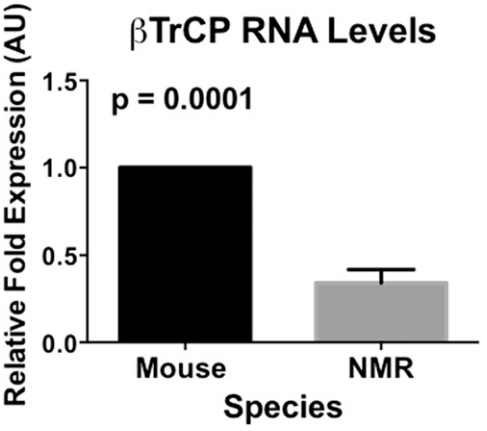

Fig. S2. βTrCP mRNA levels are significantly lower in naked mole-rats compared with mice. PCR revealed that mRNA levels of βTrCP were significantly lower ($P = 0.0001$) in long-lived naked mole-rats compared with mice. These results further support lower protein levels of βTrCP, potentially enhancing constitutive Nrf2 signaling in long-lived rodents.

Table S1. Mouse primer sequences

Gene	Forward primer	Reverse primer
Nrf2	CTCGCTGGAAAAAGAAGTGG	CCGTCCAGGAGTTCAGAGAG
Keap1	ATGGCCACACTTTTCTGGAC	TCCTGTTGTCAGTGCTCAGG
Hmox1	CACGCATATACCCGCTACCT	CCAGAGTGTTCATTCGAGCA
Gsta1	CGCCACCAAATATGACCTCT	CCTGTTGCCCACAAGGTAGT
Nqo1	TTCTCTGGCCGATTCAGAGT	GGCTGCTTGGAGCAAAATAG
βTrcP	CATGCTGTGGAAAAAGCTCA	ACTATGTCGCCCACATCTCC
Rps18	ATCCCTGAGAAGTTCCAGCA	CCTCTTGGTGAGGTCGATGT

Table S2. Naked mole-rat primer sequences

Gene	Forward primer	Reverse primer
Nrf2	TGAATTCCTCCCAATTCAGC	GCAGTGAAGACTGGGCTTTC
Keap1	TTCTTCAACCTGTCGCACTG	GAGTCGCTCTGCAGGATCTC
Hmox1	CTTTGCGCCTGTCTACTTCC	AGGTAGCGGGTGTAGGTGTG
Gsta1	AGCAAGTACCCATGGTGGAG	GGAGTCAGTGCCAGATGTGA
Nqo1	CCGTAGAGGTGCTGAAGAGG	TGCAGCTTCCACCTTCTTTT
βTrcP	TGCTCTATGCCCAGGTCTCT	AGGGGGTTCGCCATTATTAC
Rps18	TGTGGTGTTGAGGAAAGCAG	TCCCATCCTTCACATCCTTC