

Supplementary Table 1. Validation of candidate metastable epialleles. Site-specific ranges and variances of percent methylation at three candidate loci, *Dnajb1*, *Glc1l* Repeat 1, and *Glc1l* Repeat 2 are characteristic of the Agouti Expression Fingerprint.

Locus	Tissue	Site	Minimum Methylation	Maximum Methylation	Mean Methylation±SEM	Variance
Dnajb1 (N=11)	Liver	1	0	5.21	2.88±0.38	2.22
		2	0	18.95	12.06±1.23	22.67
		3	0	2.59	0.84±0.28	1.39
	Kidney	1	0	2.57	1.29±0.28	1.01
		2	0	13.11	5.95±0.82	8.82
		3	0	4.71	3.53±0.32	1.37
	Brain	1	1.03	3.70	3.00±0.23	0.56
		2	3.02	6.46	5.31±0.31	1.03
		3	0	3.80	1.20±0.29	0.96
Glc1l Repeat 1 (N=10)	Liver	1	91.74	96.2	93.58±0.46	2.15
		2	93.72	97.84	95.31±0.46	2.12
		3	99.29	100	99.93±0.07	0.05
	Kidney	1	87.11	100	93.89±1.08	11.67
		2	91.19	96.89	95.11±0.54	2.95
		3	100	100	100.00±0.00	0
	Brain	1	88.74	95.34	93.27±0.56	3.15
		2	92.92	96	94.67±0.36	1.30
		3	99.59	100	99.96±0.04	0.02
Glc1l Repeat 2 (N=9)	Liver	1	93.65	100	98.55±0.74	4.97
		2	94.52	100	98.37±0.74	4.87
		3	100	100	100.00±0.00	0
		4	78.56	88.44	83.10±1.10	10.92
	Kidney	1	89.51	100	98.19±1.18	12.47
		2	95.26	100	98.60±0.58	2.99
		3	99.04	100	99.89±0.11	0.10
		4	75.94	85.46	81.37±1.05	9.92
	Brain	1	98.63	100	99.81±0.46	0.21
		2	92.93	100	97.33±1.00	8.94
		3	100	100	100.00±0.00	0
		4	70.04	82.11	76.93±1.49	17.65

Supplementary Table 2. Primers and sequences-to-analyze for pyrosequencing assays of three candidate loci *Dnajb1*, *Glcc1l* Repeat 1, and *Glcc1l* Repeat 2, as well as primers for quantitative PCR of both candidate genes.

<i>Pyrosequencing assays</i>				
Assay	Forward PCR primer (5' to 3')	Reverse PCR primer (5' to 3')	Sequencing primer (5' to 3')	Sequence-to-analyze
<i>Dnajb1</i>	GATTAGAGTAG AGAGGGAAGG	TCCCCCAACCCT CCAAAACCTT	TAGAGAGGGAAG GGG	YGTGGTTTYGYGYG
<i>Glcc1l</i> Repeat 1	GAGGAAGTTAG GTGTAAGTT	ATACACATTCAAA ACAAATC	TTATAAGATTTAG TTGTAGTTT	YGGGYGTTATTTTGGGATTGTTGTTATAT TYGT
<i>Glcc1l</i> Repeat 2	TGGGGAGGGTT ATGTGTT	ACCCAAACCTCTA ATCACAA	TGTTTTTTTTGGGA TTGG	TYGGTTTGTYGATATTTTATTAGTATGTA TTYGATTTGGAGAGGTTGGYGTAAAGTGG TGATTAGYGTAGGYGTAGTAAGGTTGTTT ATA GTTATAGTGTATTGGATATYG
<i>Quantitative PCR assays</i>				
Assay	Forward PCR primer (5' to 3')		Reverse PCR primer (5' to 3')	
<i>Dnajb1</i>	GCCAGGCCAGCATCACAAGC		AGGAGGCTGGCCCTGTGGTC	
<i>Glcc1l</i>	TGTGCAGAGTGGACAGGCCAAAATC		GCCACTGTCCTGTGAGGTAAGGT	