

**Supplementary Table S2** | Coat color detection and genotype schemes of different Albino host <-> ES cell and chimera <-> C57BL/6 (a) or Albino host strain (b) mating partner combinations. Only (non-)agouti and tyrosinase coat color alleles are considered.

- I) Albino A++ (C57BL/6NTac- $A^{tm1.1Arte}Tyr^{tm1Arte}$ ), 100% recognition of GLT transmission by coat color with combinations 1a, 1b and 2b, note transmission of the  $A^{tm1.1}$  and  $Tyr^{tm1}$  allele with 1b and 2b.
- II) Albino (C57BL/6NTac- $A^{tm1.1Arte}$ ), 100% recognition of GLT transmission by coat color only with combination 1b, note transmission of the  $Tyr^{tm1}$  allele.

I) Albino A++ host Strain: C57BL/6NTac- $A^{tm1.1Arte}Tyr^{tm1}$ (allele configuration: $A^{tm1.1}/A^{tm1.1}$ , $Tyr^{tm1}/Tyr^{tm1}$ )						
	ES cell	Chimera Coat Color	Mating Partner	Offspring Non-Germline	Offspring Germline	
1a	B6.3-6, JM8, C57BL/6NTac (a/a, Tyr/Tyr)	C57BL/6NTac + C57BL/6NTac ( $A^{tm1.1}/A^{tm1.1}$ , $Tyr^{tm1}/Tyr^{tm1}$ ) + (a/a, Tyr/Tyr)	C57BL/6NTac (a/a, Tyr/Tyr)	C57BL/6NTac ( $A^{tm1.1}/a$ , $Tyr^{tm1}/Tyr$ )	C57BL/6NTac (a/a, Tyr/Tyr)	
1b	B6.3-6, JM8, C57BL/6NTac (a/a, Tyr/Tyr)	C57BL/6NTac + C57BL/6NTac ( $A^{tm1.1}/A^{tm1.1}$ , $Tyr^{tm1}/Tyr^{tm1}$ ) + (a/a, Tyr/Tyr)	C57BL/6NTac ( $A^{tm1.1}/A^{tm1.1}$ , $Tyr^{tm1}/Tyr^{tm1}$ )	C57BL/6NTac ( $A^{tm1.1}/A^{tm1.1}$ , $Tyr^{tm1}/Tyr^{tm1}$ )	C57BL/6NTac (a/ $A^{tm1.1}$ ), $Tyr/Tyr^{tm1}$ )	
2a	JM8A.3 (C57BL/6NTac) ( $A^{tm1Brd}/a$ , Tyr/Tyr)	C57BL/6NTac + C57BL/6NTac ( $A^{tm1.1}/A^{tm1.1}$ , $Tyr^{tm1}/Tyr^{tm1}$ ) + ( $A^{tm1Brd}/a$ , Tyr/Tyr)	C57BL/6NTac (a/a, Tyr/Tyr)	C57BL/6NTac ( $A^{tm1.1}/a$ , $Tyr^{tm1}/Tyr$ )	C57BL/6NTac (a/a, Tyr/Tyr)	C57BL/6NTac ( $A^{tm1Brd}/a$ , Tyr/Tyr)
2b	JM8A.3 (C57BL/6NTac) ( $A^{tm1Brd}/a$ , Tyr/Tyr)	C57BL/6NTac + C57BL/6NTac ( $A^{tm1.1}/A^{tm1.1}$ , $Tyr^{tm1}/Tyr^{tm1}$ ) + ( $A^{tm1Brd}/a$ , Tyr/Tyr)	C57BL/6NTac ( $A^{tm1.1}/A^{tm1.1}$ , $Tyr^{tm1}/Tyr^{tm1}$ )	C57BL/6NTac ( $A^{tm1.1}/A^{tm1.1}$ , $Tyr^{tm1}/Tyr^{tm1}$ )	C57BL/6NTac 50% (a/ $A^{tm1.1}$ , $Tyr/Tyr^{tm1}$ ) 50% ( $A^{tm1Brd}/A^{tm1.1}$ , $Tyr/Tyr^{tm1}$ )	

II) Albino host Strain: C57BL/6NTac- $Tyr^{tm1.1Arte}$ (allele configuration: a/a, $Tyr^{tm1}/Tyr^{tm1}$ )						
	ES cell	Chimera Coat Color	Mating Partner	Offspring Non-Germline	Offspring Germline	
1a	B6.3-6, JM8, C57BL/6NTac (a/a, Tyr/Tyr)	C57BL/6NTac + C57BL/6NTac (a/a, $Tyr^{tm1}/Tyr^{tm1}$ ) + (a/a, Tyr/Tyr)	C57BL/6NTac (a/a, Tyr/Tyr)	C57BL/6NTac (a/a, $Tyr^{tm1}/Tyr$ )	C57BL/6NTac (a/a, Tyr/Tyr)	
1b	B6.3-6, JM8, C57BL/6NTac (a/a, Tyr/Tyr)	C57BL/6NTac + C57BL/6NTac (a/a, $Tyr^{tm1}/Tyr^{tm1}$ ) + (a/a, Tyr/Tyr)	C57BL/6NTac (a/a, $Tyr^{tm1}/Tyr^{tm1}$ )	C57BL/6NTac (a/a, $Tyr^{tm1}/Tyr^{tm1}$ )	C57BL/6NTac (a/a, $Tyr/Tyr^{tm1}$ )	
2a	JM8A.3 (C57BL/6NTac) ( $A^{tm1Brd}/a$ , Tyr/Tyr)	C57BL/6NTac + C57BL/6NTac (a/a, $Tyr^{tm1}/Tyr^{tm1}$ ) + ( $A^{tm1Brd}/a$ , Tyr/Tyr)	C57BL/6NTac (a/a, Tyr/Tyr)	C57BL/6NTac (a/a, $Tyr^{tm1}/Tyr$ )	C57BL/6NTac (a/a, Tyr/Tyr)	C57BL/6NTac ( $A^{tm1Brd}/a$ , Tyr/Tyr)
2b	JM8A.3 (C57BL/6NTac) ( $A^{tm1Brd}/a$ , Tyr/Tyr)	C57BL/6NTac + C57BL/6NTac (a/a, $Tyr^{tm1}/Tyr^{tm1}$ ) + ( $A^{tm1Brd}/a$ , Tyr/Tyr)	C57BL/6NTac (a/a, $Tyr^{tm1}/Tyr^{tm1}$ )	C57BL/6NTac (a/a, $Tyr^{tm1}/Tyr^{tm1}$ )	C57BL/6NTac (a/a, $Tyr/Tyr^{tm1}$ )	C57BL/6NTac ( $A^{tm1Brd}/a$ , $Tyr/Tyr^{tm1}$ )