Appendix 1

| t complex genotypes of $39+/+$ dams with $\geq 1$ t/+ fetus |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\ln (17) 2$ |  |  | $\ln (17) 4$ |  |  |
| Litter | 119 | Tcp1 | 40 | Hba | TSE | 89 |
| 96wo1mom |  | +/+ |  |  |  |  |
| 96wo1f |  |  |  | t/+ |  |  |
| 96wo1e |  | +/+ |  | t/+ |  |  |
| 96wo1d |  | t/+ |  | t/+ |  |  |
| 96wo1c |  | t/+ |  | t/+ |  |  |
| 96wo1b |  |  |  | t/+ |  |  |
| 96wo1a |  | t/+ |  | t/+ |  |  |
|  |  |  |  |  |  |  |
| 96wo17mom |  | +/+ |  | +/+ |  |  |
| 96wo17e |  | +/+ |  | +/+ |  |  |
| 96wo17d |  | t/+ |  | +/+ |  |  |
| 96wo17c |  | +/+ |  | t/+ |  |  |
| 96wo17b |  | +/+ |  | +/+ |  |  |
| 96wo17a |  | +/+ |  | +/+ |  |  |
|  |  |  |  |  |  |  |
| 96cm8mom |  | +/+ |  | +/+ |  |  |
| 96cm8e |  | +/+ |  | t/+ |  |  |
| 96cm8d |  | +/+ |  | t/+ |  |  |
| 96cm8c |  | t/+ |  | t/+ |  |  |
| 96cm8b |  | t/+ |  | t/+ |  |  |
| 96cm8a |  | +/+ |  | t/+ |  |  |
|  |  |  |  |  |  |  |
| 96cm13mom |  | +/+ |  | +/+ |  |  |
| 96cm13d |  | +/+ |  | +/+ |  |  |
| 96cm13c |  | +/+ |  | t/+ |  |  |
| 96cm13b |  | +/+ |  | t/+ |  |  |
| 96cm13a |  | t/+ |  | t/+ |  |  |
|  |  |  |  |  |  |  |
| 96cm11mom |  | +/+ |  | +/+ |  |  |
| $96 \mathrm{cm11g}$ |  | +/+ |  | +/+ |  |  |
| 96cm11f |  | +/+ |  | t/+ |  |  |
| 96cm11e |  | +/+ |  | +/+ |  |  |
| 96cm11d |  | +/+ |  | +/+ |  |  |
| 96cm11c |  | +/+ |  | +/+ |  |  |
| 96cm11b |  | +/+ |  | +/+ |  |  |
| 96cm11a |  |  |  | t/+ |  |  |
|  |  |  |  |  |  |  |
| 962m81mom |  | +/+ |  |  |  |  |
| 962m81e |  | +/+ |  | t/+ |  |  |
| 962m81d |  | +/+ |  | t/+ |  |  |
| 962m81c |  | +/+ |  | +/+ |  |  |
| 962m81b |  | +/+ |  | +/+ |  |  |
| 962m81a |  | +/+ |  | t/+ |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

Appendix 1

|  | $\ln (17) 2$ |  |  | $\ln (17) 4$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Litter | 119 | Tcp1 | 40 | Hba | TSE | 89 |
| 962m79mom |  | +/+ |  | +/+ |  |  |
| 962m79c |  | t/+ |  | t/+ |  |  |
| 962m79b |  | +/+ |  | +/+ |  |  |
| 962m79a |  | +/+ |  |  |  |  |
|  |  |  |  |  |  |  |
| 962m73mom |  |  |  | +/+ |  |  |
| 962m73b |  | t/+ |  | +/+ |  |  |
| 962m73a |  | +/+ |  | +/+ |  |  |
|  |  |  |  |  |  |  |
| 962m6mom |  | +/+ |  | +/+ |  |  |
| 962m6f |  | t/+ |  | t/+ |  |  |
| 962m6e |  | t/+ |  | t/+ |  |  |
| 962m6d |  | +/+ |  | +/+ |  |  |
| 962m6c |  | +/+ |  | t/+ |  |  |
| 962m6b |  | t/+ |  | t/+ |  |  |
| 962m6a |  | t/+ |  | t/+ |  |  |
|  |  |  |  |  |  |  |
| 962m58mom |  | +/+ |  | +/+ |  |  |
| 962m58i |  | t/+ |  | t/+ |  |  |
| 962m58h |  | t/+ |  | t/+ |  |  |
| 962m58g |  | t/+ |  | t/+ |  |  |
| 962m58f |  | t/+ |  | t/+ |  |  |
| 962m58e |  | +/+ |  | t/+ |  |  |
| 962m58d |  | t/+ |  | t/+ |  |  |
| 962m58c |  | t/+ |  | t/+ |  |  |
| 962m58b |  | +/+ |  | t/+ |  |  |
| 962m58a |  | t/+ |  | t/+ |  |  |
|  |  |  |  |  |  |  |
| 962m34mom |  | +/+ |  | +/+ |  |  |
| 962m34g |  | +/+ |  | +/+ |  |  |
| 962m34f |  | +/+ |  | t/+ |  |  |
| 962m34e |  | +/+ |  | +/+ |  |  |
| 962m34d |  | +/+ |  | +/+ |  |  |
| 962m34c |  | +/+ |  | +/+ |  |  |
| 962m34b |  | +/+ |  | +/+ |  |  |
| 962m34a |  | +/+ |  | +/+ |  |  |
|  |  |  |  |  |  |  |
| 962m2mom |  | +/+ |  | +/+ |  |  |
| 962m2i |  |  |  | t/+ |  |  |
| 962m2h |  | +/+ |  | t/+ |  |  |
| 962m2g |  | +/+ |  | t/+ |  |  |
| 962m2f |  | t/+ |  | t/+ |  |  |
| 962m2e |  | +/+ |  | t/+ |  |  |
| 962m2d |  | t/+ |  | t/+ |  |  |
| 962m2c |  | +/+ |  | t/+ |  |  |
| 962m2b |  | +/+ |  | +/+ |  |  |
| 962m2a |  | t/+ |  | +/+ |  |  |

Appendix 1

|  | $\ln (17) 2$ |  |  | $\ln (17) 4$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Litter | 119 | Tcp1 | 40 | Hba | TSE | 89 |
| 962m13mom |  |  |  | +/+ |  |  |
| 962m13a |  | t/+ |  | t/+ |  |  |
| 95wo53mom |  | +/+ |  | +/+ |  |  |
| 95wo53f |  | +/+ |  | +/+ |  |  |
| 95wo53e |  | +/+ |  | +/+ |  |  |
| 95wo53d |  | +/+ |  | +/+ |  |  |
| 95wo53c |  | t/+ |  | t/+ |  |  |
| 95wo53b |  | +/+ |  | +/+ |  |  |
| 95wo53a |  | +/+ |  | +/+ |  |  |
|  |  |  |  |  |  |  |
| 95wo4mom |  | +/+ |  | +/+ |  |  |
| 95wo4e |  | t/+ |  | t/+ |  |  |
| 95wo4d |  | +/+ |  | +/+ |  |  |
| 95wo4c |  | +/+ |  | +/+ |  |  |
| 95wo4b |  | +/+ |  | +/+ |  |  |
| 95wo4a |  | +/+ |  | +/+ |  |  |
|  |  |  |  |  |  |  |
| 95wo13mom |  | +/+ |  | +/+ |  |  |
| 95wo13m |  | +/+ |  | +/+ |  |  |
| 95wo13I |  | +/+ |  | +/+ |  |  |
| 95wo13k |  | +/+ |  | +/+ |  |  |
| 95wo13j |  | +/+ |  | +/+ |  |  |
| 95wo13i |  | +/+ |  | t/+ |  |  |
| 95wo13h |  | +/+ |  | +/+ |  |  |
| 95wo13g |  | +/+ |  | +/+ |  |  |
| 95wo13f |  | +/+ |  | +/+ |  |  |
| 95wo13e |  | +/+ |  | t/+ |  |  |
| 95wo13d |  | +/+ |  | +/+ |  |  |
| 95wo13c |  | +/+ |  | +/+ |  |  |
| 95wo13b |  | +/+ |  | t/+ |  |  |
| 95wo13a |  | +/+ |  | +/+ |  |  |
|  |  |  |  |  |  |  |
| 95we7mom |  | +/+ |  | +/+ |  |  |
| 95we7e |  | +/+ |  | t/+ |  |  |
| 95we7d |  | +/+ |  | t/+ |  |  |
| 95we7c |  | t/+ |  | +/+ |  |  |
| 95we7b |  | t/+ |  | t/+ |  |  |
| 95we7a |  | t/+ |  | t/+ |  |  |
|  |  |  |  |  |  |  |
| 95sl44mom |  |  |  | +/+ |  |  |
| 95sl44g |  |  |  | +/+ |  |  |
| 95sl44f |  |  |  | +/+ |  |  |
| 95sl44b |  |  |  | +/+ |  |  |
| 95sl44a |  | t/+ |  | +/+ |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

Appendix 1

|  | $\ln (17) 2$ |  |  | $\ln (17) 4$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Litter | 119 | Tcp1 | 40 | Hba | TSE | 89 |
|  |  |  |  |  |  |  |
| 95sl43mom |  |  |  | +/+ |  |  |
| 95sl43g |  |  |  | +/+ |  |  |
| 95sl43f |  |  |  | +/+ |  |  |
| 95sl43e |  |  |  | +/+ |  |  |
| 95sl43d |  |  |  | +/+ |  |  |
| 95sl43c |  |  |  | +/+ |  |  |
| 95sl43b |  | t/+ |  | +/+ |  |  |
| 95sl43a |  |  |  | +/+ |  |  |
|  |  |  |  |  |  |  |
| 95sl29mom |  | +/+ |  | +/+ |  |  |
| 95sI29h |  | +/+ |  | +/+ |  |  |
| 95sl29g |  |  |  | +/+ |  |  |
| 95sl29f |  |  |  | +/+ |  |  |
| 95sl29e |  | t/+ |  | +/+ |  |  |
| 95sl29d |  | t/+ |  | +/+ |  |  |
| 95sl29c |  |  |  | +/+ |  |  |
| 95sl29b |  |  |  | +/+ |  |  |
| 95sI29a |  |  |  | +/+ |  |  |
|  |  |  |  |  |  |  |
| 95ny18mom |  | +/+ |  | +/+ |  |  |
| 95ny18f |  | t/+ |  | t/+ |  |  |
| 95ny18e |  |  |  | t+ |  |  |
| 95ny18d |  | t/+ |  | t/+ |  |  |
| 95ny18c |  |  |  | t/+ |  |  |
| $95 n y 18 \mathrm{~b}$ |  |  |  | t/+ |  |  |
| 95ny18a |  | t/+ |  | t/+ |  |  |
|  |  |  |  |  |  |  |
| 95mi8mom |  | +/+ |  | +/+ |  |  |
| 95 mi 8 g |  | t/+ |  | t/+ |  |  |
| $95 \mathrm{mi8f}$ |  | t/+ |  | t/+ |  |  |
| $95 \mathrm{mi8e}$ |  | t/+ |  | t/+ |  |  |
| 95mi8d |  | t/+ |  | t/+ |  |  |
| 95mi8c |  | t/+ |  | t+ |  |  |
| 95mi8b |  | t/+ |  | t/+ |  |  |
| 95mi8a |  | t/+ |  | t+ |  |  |
|  |  |  |  |  |  |  |
| 95he4mom |  | +/+ |  | +/+ |  |  |
| 95he4f |  | +/+ |  | +/+ |  |  |
| 95he4e |  | +/+ |  | +/+ |  |  |
| 95he4d |  | t/+ |  | t/+ |  |  |
| 95he4c |  | +/+ |  |  |  |  |
| 95he4b |  | +/+ |  | t/+ |  |  |
| 95he4a |  | +/+ |  | t/+ |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

Appendix 1

|  | $\ln (17) 2$ |  |  | $\ln (17) 4$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Litter | 119 | Tcp1 | 40 | Hba | TSE | 89 |
| 95cm56mom |  | +/+ |  | +/+ |  |  |
| 95cm56h |  | +/+ |  | t/+ |  |  |
| 95cm56g |  | +/+ |  | t/+ |  |  |
| 95cm56f |  | +/+ |  | t/+ |  |  |
| 95cm56e |  | t/+ |  | t/+ |  |  |
| 95cm56d |  | +/+ |  |  |  |  |
| 95cm56c |  | +/+ |  | +/+ |  |  |
| 95cm56b |  | t/+ |  | t/+ |  |  |
| 95cm56a |  |  |  | t/+ |  |  |
|  |  |  |  |  |  |  |
| 95cm48mom |  | +/+ |  | +/+ |  |  |
| 95cm48i |  | +/+ |  | t/+ |  |  |
| 95cm48h |  | t/+ |  | t/+ |  |  |
| 95cm48g |  | +/+ |  | t/+ |  |  |
| 95cm48f |  | +/+ |  | t/+ |  |  |
| 95cm48e |  |  |  | t/+ |  |  |
| 95cm48d |  | t/+ |  | t/+ |  |  |
| 95cm48c |  | t/+ |  | t/+ |  |  |
| 95cm48b |  | t/+ |  | t/+ |  |  |
| 95cm48a |  | +/+ |  | t/+ |  |  |
|  |  |  |  |  |  |  |
| 952m99mom |  | +/+ |  | +/+ |  |  |
| 952m99h |  |  |  | +/+ |  |  |
| 952m99g |  | +/+ |  | +/+ |  |  |
| 952m99f |  | +/+ |  | +/+ |  |  |
| 952m99e |  | +/+ |  | +/+ |  |  |
| 952m99d |  | +/+ |  | +/+ |  |  |
| 952m99c |  | t/+ |  | +/+ |  |  |
| 952m99b |  | +/+ |  | +/+ |  |  |
| 952m99a |  | +/+ |  | +/+ |  |  |
|  |  |  |  |  |  |  |
| 952m33mom |  | +/+ |  | +/+ |  |  |
| 952m33d |  | +/+ |  | +/+ |  |  |
| 952m33c |  | +/+ |  | +/+ |  |  |
| 952m33b |  | t/+ |  | t/+ |  |  |
| 952m33a |  | +/+ |  | +/+ |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 952m17mom |  | +/+ |  | +/+ |  |  |
| 952m17h |  | t/+ |  | t/+ |  |  |
| 952m17g |  | +/+ |  | +/+ |  |  |
| 952m17f |  | +/+ |  | +/+ |  |  |
| 952m17e |  | +/+ |  | +/+ |  |  |
| 952m17d |  | +/+ |  | +/+ |  |  |
| 952m17c |  | +/+ |  | +/+ |  |  |
| 952m17b |  | +/+ |  | +/+ |  |  |
| 952m17a |  | +/+ |  | +/+ |  |  |

Appendix 1

|  | $\ln (17) 2$ |  |  | $\ln (17) 4$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Litter | 119 | Tcp1 | 40 | Hba | TSE | 89 |
| 89ut59mom |  | +/+ | +/+ | +/+ | +/+ | +/+ |
| 89ut59f |  | +/+ | +/+ | +/+ | +/+ | +/+ |
| 89ut59e |  | +/+ | +/+ | +/+ | t/+ | +/+ |
| 89ut59d |  | +/+ |  | +/+ | t/+ | +/+ |
| 89ut59c |  | +/+ |  | +/+ | +/+ | +/+ |
| 89ut59b |  | +/+ | +/+ | +/+ | +/+ | +/+ |
| 89ut59a |  | +/+ |  | +/+ |  |  |
|  |  |  |  |  |  |  |
| 89sn1005mom |  | +/+ |  | +/+ |  |  |
| 89sn1005f |  | +/+ |  | +/+ |  |  |
| 89sn1005e |  | +/+ |  | +/+ |  |  |
| 89sn1005d |  | +/+ |  | +/+ |  |  |
| 89sn1005c |  | +/+ |  | +/+ |  |  |
| 89sn1005b |  | t/+ |  | +/+ |  |  |
| 89sn1005a |  | +/+ |  | +/+ |  |  |
| 89sj40me |  |  |  |  |  |  |
|  | +/+ | +/+ | +/+ | +/+ |  | +/+ |
| 89sj40e |  | t/+ |  | t/+ |  |  |
| 89sj40d |  |  |  | t/+ |  |  |
| 89sj40c |  | t/+ |  | t/+ |  |  |
| 89sj40b |  | t/+ |  |  |  |  |
| 89sj40a |  | t/+ |  | t/+ |  |  |
|  |  |  |  |  |  |  |
| 89rf213m | +/+ | +/+ | +/+ | +/+ |  | +/+ |
| $89 r f 213 j$ |  | +/+ |  | +/+ |  |  |
| 89rf213i |  | +/+ |  | +/+ |  |  |
| 89rf213h |  | +/+ |  | +/+ |  |  |
| 89rf213g |  | t/+ |  | +/+ |  |  |
| 89rf213f |  | +/+ |  | +/+ |  |  |
| 89rf213e |  | +/+ |  | t/+ |  |  |
| 89rf213d |  | +/+ |  | +/+ |  |  |
| 89rf213c |  | +/+ |  | +/+ |  |  |
| 89rf213b |  | +/+ |  | +/+ |  |  |
| 89rf213a |  | +/+ |  | +/+ |  |  |
|  |  |  |  |  |  |  |
| 89rf164mom |  | +/+ |  | +/+ |  |  |
| 89rf164f |  | t/+ |  | +/+ |  |  |
| 89rf164e |  | +/+ |  | +/+ |  |  |
| 89rf164d |  | +/+ |  | +/+ |  |  |
| 89rf164c |  | t/+ |  | +/+ |  |  |
| 89rf164b |  |  |  | +/+ |  |  |
| 89rf164a |  | +/+ |  | +/+ |  |  |
| - |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| $\square$ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

Appendix 1

|  | $\ln (17) 2$ |  |  | $\ln (17) 4$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Litter | 119 | Tcp1 | 40 | Hba | TSE | 89 |
| 89mi36m | +/+ | +/+ |  | +/+ |  |  |
| 89mi36f |  | +/+ |  | t/+ |  |  |
| 89mi36e |  |  |  | +/+ |  |  |
| 89mi36d |  | +/+ |  | +/+ |  |  |
| 89mi36c | +/+ | +/+ |  | +/+ |  |  |
| 89mi36b | +/+ | +/+ |  | +/+ |  |  |
| 89mi36a |  | +/+ |  | +/+ |  |  |
|  |  |  |  |  |  |  |
| 89c27mo | +/+ | +/+ |  | +/+ |  |  |
| 89c27e |  | +/+ |  | +/+ |  |  |
| 89c27d |  | +/+ |  | +/+ |  |  |
| 89c27c |  | +/+ |  | +/+ |  |  |
| 89c27b | t/+ | +/+ |  | t/+ |  |  |
| 89c27a |  | +/+ |  | t/+ |  |  |
|  |  |  |  |  |  |  |
| 89c156m | +/+ | +/+ | +/+ | +/+ | +/+ | +/+ |
| 89c156g | +/+ | +/+ |  | +/+ |  |  |
| 89c156f | +/+ | +/+ | +/+ | +/+ |  | +/+ |
| 89c156e | +/+ | +/+ | +/+ | +/+ |  | +/+ |
| 89c156d | +/+ | +/+ | +/+ | +/+ |  | +/+ |
| 89c156b | +/+ | +/+ | +/+ | +/+ | +/+ | +/+ |
| 89c156a | +/+ | +/+ | +/+ | +/+ | t/+ | t/+ |
|  |  |  |  |  |  |  |
| 892m409 | +/+ | +/+ |  | +/+ |  |  |
| 892m409 |  | +/+ |  | +/+ |  |  |
| 892m409 |  | t/+ |  | t/+ |  |  |
| 892m409 |  |  |  | t/+ |  |  |
| 892m409 | t/+ | +/+ |  | t/+ |  |  |
| 892m409 | t/+ | t/+ |  | t/+ |  |  |
| 892m409 |  | +/+ |  | +/+ |  |  |


| $892 \mathrm{~m} 250+/+$ |  | $+/+$ | $+/+$ |  | $+/+$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $892 \mathrm{~m} 250+/+$ | $+/+$ | $+/+$ | $+/+$ |  | $+/+$ |
| $892 \mathrm{~m} 250+/+$ | $+/+$ | $+/+$ | $+/+$ |  | $+/+$ |
| $892 \mathrm{~m} 250+/+$ | $+/+$ | $+/+$ | $+/+$ |  | $+/+$ |
| $892 \mathrm{~m} 250+/+$ |  | $+/+$ | $+/+$ |  | $+/+$ |
| $892 \mathrm{~m} 250+/+$ | $+/+$ | $+/+$ | $+/+$ |  | $+/+$ |
| $892 \mathrm{~m} 250+/+$ | $+/+$ | $+/+$ | $+/+$ |  | $+/+$ |
| $892 \mathrm{~m} 250+/+$ | $\mathrm{t} /+$ | $+/+$ | $\mathrm{t} /+$ |  | $\mathrm{t} /+$ |
|  |  |  |  |  |  |
| 892 m 186 mom | $+/+$ |  | $+/+$ |  |  |
| 892 m 186 g | $+/+$ |  | $+/+$ |  |  |
| 892 m 186 f | $+/+$ |  | $\mathrm{t} /+$ |  |  |
| 892 m 186 e | $+/+$ |  | $+/+$ |  |  |
| 892 m 186 d | $+/+$ |  | $+/+$ |  |  |
| $892 m 186 \mathrm{c}$ | $+/+$ |  | $+/+$ |  |  |
| 892 m 186 b | $+/+$ |  | $+/+$ |  |  |

+//+
$\square$

