

Supplementary Material

Successful cloning of coyotes through interspecies somatic cell nuclear transfer using domestic dog oocytes

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Table S1. Microsatellite analysis of female coyotes in 19 canine makers

Values represent lengths of amplified microsatellite fragments. ^aHomologous results were denoted as XX and heterozygous results were denoted as XY

| Marker | Donor | CLF1 | CLF2 | CLF3 | CLF4 | CLF5 |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Amelogenin^a | XX | XX | XX | XX | XX | XX |
| AHTk211 | 85.3 | 85.3 | 85.3 | 85.3 | 85.3 | 85.2 |
| CXX279 | 117.8 / 123.8 | 117.9 / 123.8 | 117.8 / 123.7 | 117.9 / 123.8 | 117.8 / 123.7 | 117.9 / 123.8 |
| REN169O18 | 152.4 | 152.3 | 152.3 | 152.3 | 152.3 | 152.4 |
| INU055 | 198.3 / 209.8 | 198.2 / 209.7 | 198.2 / 209.7 | 198.2 / 209.7 | 198.2 / 209.7 | 198.2 / 209.8 |
| REN54P11 | 228.6 / 230.6 | 228.5 / 230.5 | 228.5 / 230.5 | 228.5 / 230.6 | 228.5 / 230.6 | 228.5 / 230.6 |
| INRA21 | 86.1 | 86.1 | 86.1 | 86.1 | 86.1 | 86.1 |
| AHT137 | 143.8 / 146.0 | 143.8 / 145.9 | 143.7 / 145.8 | 143.8 / 146.0 | 143.8 / 145.8 | 143.8 / 146.0 |
| REN169D01 | 206.2 / 210.3 | 206.2 / 210.2 | 206.1 / 210.2 | 206.1 / 210.2 | 206.1 / 210.2 | 206.2 / 210.2 |
| AHTh260 | 224.2 / 226.2 | 224.2 / 226.2 | 224.1 / 226.1 | 224.1 / 226.1 | 224.1 / 226.2 | 224.1 / 226.2 |
| AHTk253 | 285.7 / 287.8 | 285.7 / 287.8 | 285.7 / 287.7 | 285.7 / 287.8 | 285.7 / 287.8 | 285.7 / 287.9 |
| INU005 | 121.8 / 123.8 | 121.9 / 123.8 | 121.9 / 123.7 | 121.9 / 123.8 | 121.9 / 123.8 | 121.9 / 123.9 |
| INU030 | 136.4 | 136.4 | 136.3 | 136.4 | 136.4 | 136.5 |
| FH2848 | 231.4 | 231.4 | 231.3 | 231.3 | 231.3 | 231.4 |
| AHT121 | 98.8 / 100.7 | 98.7 / 100.6 | 98.7 / 100.6 | 98.7 / 100.6 | 98.7 / 100.6 | 98.7 / 100.7 |
| FH2054 | 137.2 / 150.4 | 137.2 / 150.3 | 137.1 / 150.3 | 137.2 / 150.4 | 137.2 / 150.3 | 137.2 / 150.4 |
| REN162C04 | 189.8 | 189.6 | 189.7 | 189.6 | 189.6 | 189.7 |
| AHTh171 | 230.8 / 236.5 | 230.8 / 236.5 | 230.7 / 236.5 | 230.8 / 236.5 | 230.7 / 236.5 | 230.8 / 236.5 |
| REN247M23 | 267.1 | 267.0 | 267.0 | 267.1 | 267.0 | 267.1 |

Table S2. Microsatellite analysis of male coyotes in 19 canine makers

Values represent lengths of amplified microsatellite fragments. ^aHomologous results were denoted as XX and heterozygous results were denoted as XY

| Marker | Donor | CLM1 | CLM2 | CLM3 | CLM4 | CLM5 | CLM6 | CLM7 | CLM8 |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Amelogenin^a | XY | XY | XY | XY | XY | XY | XY | XY | XY |
| AHTk211 | 87.3 | 87.3 | 87.3 | 87.3 | 87.3 | 87.2 | 87.3 | 87.2 | 87.3 |
| CXX279 | 118.0 / 120.0 | 118.0 / 120.0 | 118.0 / 120.0 | 118.0 / 120.1 | 118.1 / 120.1 | 118.1 / 120.0 | 118.1 / 120.1 | 118.1 / 120.0 | 118.1 / 120.0 |
| REN169O18 | 152.4 / 156.8 | 152.5 / 156.9 | 152.5 / 157.0 | 152.5 / 156.8 | 152.4 / 157.0 | 152.4 / 156.8 | 152.4 / 156.8 | 152.4 / 156.8 | 152.5 / 156.8 |
| INU055 | 198.3 | 198.4 | 198.3 | 198.4 | 198.4 | 198.3 | 198.3 | 198.3 | 198.3 |
| REN54P11 | 228.6 / 230.6 | 228.6 / 230.7 | 228.5 / 230.6 | 228.7 / 230.7 | 228.6 / 230.8 | 228.5 / 230.7 | 228.6 / 230.6 | 228.5 / 230.7 | 228.6 / 230.7 |
| INRA21 | 77.5 / 92.8 | 77.4 / 92.7 | 77.4 / 92.7 | 77.4 / 92.7 | 77.5 / 92.8 | 77.4 / 92.6 | 77.4 / 92.7 | 77.4 / 92.6 | 77.4 / 92.7 |
| AHT137 | 143.9 / 148.1 | 143.9 / 148.2 | 143.9 / 148.1 | 143.9 / 148.1 | 143.9 / 148.1 | 143.9 / 148.1 | 143.9 / 148.1 | 143.9 / 148.1 | 143.9 / 148.2 |
| REN169D01 | 206.2 / 210.3 | 206.2 / 210.3 | 206.1 / 210.2 | 206.2 / 210.3 | 206.3 / 210.3 | 206.2 / 210.3 | 206.2 / 210.2 | 206.2 / 210.3 | 206.2 / 210.3 |
| AHTh260 | 226.2 / 244.8 | 226.2 / 244.8 | 226.2 / 244.7 | 226.2 / 244.9 | 226.2 / 244.8 | 226.2 / 244.7 | 226.2 / 244.8 | 226.2 / 244.7 | 226.2 / 244.8 |
| AHTk253 | 298.3 | 298.3 | 298.2 | 298.3 | 298.3 | 298.2 | 298.3 | 298.2 | 298.2 |
| INU005 | 116.3 / 124.0 | 116.3 / 123.9 | 116.3 / 123.8 | 116.2 / 123.9 | 116.3 / 124.0 | 116.2 / 123.9 | 116.2 / 124.0 | 116.2 / 123.9 | 116.3 / 123.9 |
| INU030 | 146.9 / 149.2 | 147.1 / 149.2 | 147.0 / 149.2 | 147.0 / 149.2 | 147.0 / 149.2 | 147.0 / 149.2 | 147.0 / 149.1 | 147.0 / 149.2 | 147.0 / 149.2 |
| FH2848 | 235.4 | 235.5 | 235.4 | 235.6 | 235.6 | 235.5 | 235.4 | 235.5 | 235.5 |
| AHT121 | 95.1 / 100.8 | 95.0 / 100.8 | 95.0 / 100.7 | 95.1 / 100.8 | 95.1 / 100.8 | 95.0 / 100.7 | 95.1 / 100.8 | 95.0 / 100.7 | 95.1 / 100.8 |
| FH2054 | 137.3 / 146.0 | 137.4 / 146.1 | 137.3 / 146.1 | 137.3 / 146.1 | 137.3 / 146.1 | 137.3 / 146.1 | 137.3 / 146.1 | 137.3 / 146.1 | 137.4 / 146.1 |
| REN162C04 | 189.8 / 201.1 | 189.8 / 201.2 | 189.8 / 201.1 | 189.8 / 201.2 | 189.9 / 201.3 | 189.8 / 201.2 | 189.8 / 201.1 | 189.8 / 201.2 | 189.9 / 201.1 |
| AHTh171 | 230.8 / 236.6 | 230.9 / 236.6 | 230.8 / 236.5 | 230.9 / 236.6 | 230.9 / 236.6 | 230.8 / 236.6 | 230.8 / 236.5 | 230.8 / 236.6 | 230.8 / 236.5 |
| REN247M23 | 265.3 / 267.3 | 265.4 / 267.3 | 265.2 / 267.3 | 265.4 / 267.3 | 265.4 / 267.4 | 265.3 / 267.3 | 265.3 / 267.2 | 265.3 / 267.3 | 265.4 / 267.3 |

Table S3. mtDNA sequence analysis of cloned coyotes and their relevant domestic dog oocyte donors

^aGeneBank Accession No. U96639

| Nucleotide Position | 15519 | 15557 | 15595 | 15596 | 15611 | 15613 | 15617 | 15621 | 15625 | 15627 | 15628 | 15632 | 15639 | 15640 | 15641 |
|------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Reference^a | C | T | C | C | T | A | C | C | T | A | T | C | T | T | C |
| Donor (Female) | T | C | C | T | C | G | T | C | C | G | C | C | T | C | A |
| CLF1 | C | T | C | C | T | A | C | C | T | A | T | C | A | T | C |
| Oocyte Donor | C | T | C | C | T | A | C | C | T | A | T | C | A | T | C |
| CLF2 | C | T | C | C | T | A | C | T | T | A | T | C | A | T | C |
| CLF3 | C | T | C | C | T | A | C | T | T | A | T | C | A | T | C |
| CLF4 | C | T | C | C | T | A | C | T | T | A | T | C | A | T | C |
| CLF5 | C | T | C | C | T | A | C | T | T | A | T | C | A | T | C |
| Oocyte Donor | C | T | C | C | T | A | C | T | T | A | T | C | A | T | C |
| Donor (Male) | T | C | C | T | C | G | T | C | C | G | C | C | T | C | A |
| CLM1 | C | T | C | C | T | A | C | C | T | A | T | C | A | T | C |
| Oocyte Donor | C | T | C | C | T | A | C | C | T | A | T | C | A | T | C |
| CLM2 | C | T | C | C | T | A | C | C | C | G | T | C | A | T | C |
| CLM3 | C | T | C | C | T | A | C | C | C | G | T | C | A | T | C |
| CLM4 | C | T | C | C | T | A | C | C | C | G | T | C | A | T | C |
| Oocyte Donor | C | T | C | C | T | A | C | C | C | G | T | C | A | T | C |
| CLM5 | C | T | T | C | T | A | C | C | T | A | T | T | G | T | C |
| CLM6 | C | T | T | C | T | A | C | C | T | A | T | T | G | T | C |
| CLM7 | C | T | T | C | T | A | C | C | T | A | T | T | G | T | C |
| Oocyte Donor | C | T | T | C | T | A | C | C | T | A | T | T | G | T | C |
| CLM8 | C | T | C | C | T | A | C | C | T | A | T | C | T | T | C |
| Oocyte Donor | C | T | C | C | T | A | C | C | T | A | T | C | T | T | C |