Target <sup>1</sup>	Possible Kin	MT Haplotype <sup>2</sup>	Number of Mismatches <sup>3</sup>	CERVUS Parentage Confidence Level <sup>4</sup>	KINSHIP Relatedness (R)⁵	KINSHIP Parent- Offspring <sup>6</sup>	KINSHIP Full Sibling <sup>7</sup>	KINSHIP Maternal Half Sibling <sup>8</sup>	KINSHIP Paternal Half Sibling <sup>9</sup>	Likely Relationship to Target
Ch-047	Ch-082	1	0	80%	0.37	*	NS	NS	NS	Mother or other close kir
Ch-082	Ch-083	1	1	NA	0.40	NA	*	*	*	Sibling
Ch-083	Ch-047	1	3	NA	0.04	NA	NS	NS	NS	None
Ch-081	Ch-077 <sup>10</sup>	1	0	NA	0.38	NA	*	*	NS	None
Ch-088	Ch-086	2	0	80%	0.48	***	***	***	***	Mother
Ch-088	Ch-107	2	1	NA	0.42	NA	***	***	***	Other kin
Ch-086	Ch-107	2	1	NA	0.68	NA	***	***	***	Sibling
Ch-088	Ch-029	2	0	NS	0.46	*	*	*	*	Other kin
Ch-029	Ch-107	2	1	NA	0.12	NA	NS	NS	NS	None
Ch-029	Ch-086	2	1	NA	0.13	NA	NS	NS	NS	None
Ch-087	Ch-029	2	0	95%	0.39	*	*	*	*	Other kin
Ch-087	Ch-088	2	1	NA	0.32	NA	*	*	*	Other kin
Ch-087	Ch-107	2	2	NA	0.19	NA	*	*	*	Other kin
Ch-087	Ch-086	2	3	NA	0.06	NA	NS	NS	NS	None
Ch-087	Ch-085	2	0	95% <sup>11</sup>	0.38	*	*	*	*	Sibling or other kin
Ch-029	Ch-085	2	1	NA	0.45	NA	*	*	*	Sibling or other kin
Ch-088	Ch-085	2	4	NA	-0.11	NA	NS	NS	NS	None
Ch-107	Ch-085	2	3	NA	-0.03	NA	NS	NS	NS	None
Ch-086	Ch-085	2	4	NA	-0.22	NA	NS	NS	NS	None
Ch-070	Ch-042	2	1	NA	0.19	NA	NS	NS	NS	None
Ch-070	Ch-029	2	1	NA	0.18	NA	NS	NS	NS	None
Ch-108	Ch-089	3	0	95%	0.45	***	***	***	***	Mother
Ch-021	Ch-089	3	0	95%	0.41	***	***	***	***	Mother
Ch-103 <sup>12</sup>	Ch-089	3	6	NA	0.24	NA	NS	NS	NS	Grandmothe
Ch-118	Ch-089	3	0	95%	0.43	***	*	*	***	Mother
Ch-118	Ch-108	3	1	NA	0.46	NA	***	***	***	Sibling
Ch-021	Ch-108	3	3	NA	0.20	NA	NS	*	*	Sibling
Ch-118	Ch-021	3	4	NA	-0.17	NA	NS	NS	NS	Sibling
Ch-095	Ch-050 <sup>13</sup>	3	0	95%	0.92	***	***	***	***	Sibling or other kin
Ch-052 <sup>13</sup>	Ch-095	3	0	NA	0.50	NA	*	***	NS	Other kin
Ch-061 <sup>13</sup>	Ch-095	3	0	NA	0.38	NA	*	***	NS	Other kin
Ch-080	Ch-106	9	1	NA	0.27	NA	NS	NS	NS	None
Ch-101	Ch-099	10	0	80%	0.59	***	***	***	***	Mother
Ch-071	Ch-099	10	0	80%	0.54	***	***	***	***	Mother
Ch-091	Ch-099	10	0	Ch-071 <sup>14</sup> 80%	0.62	***	***	***	***	Mother

Target <sup>1</sup>	Possible Kin	MT Haplotype <sup>2</sup>	Number of Mismatches <sup>3</sup>	CERVUS Parentage Confidence Level <sup>4</sup>	KINSHIP Relatedness (R)⁵	KINSHIP Parent- Offspring <sup>6</sup>	KINSHIP Full Sibling <sup>7</sup>	KINSHIP Maternal Half Sibling <sup>8</sup>	KINSHIP Paternal Half Sibling <sup>9</sup>	Likely Relationship to Target
Ch-091	Ch-071	10	0	80%	0.75	***	***	***	***	Sibling
Ch-101	Ch-091	10	0	Ch-099 <sup>14</sup> 80%	0.83	***	***	***	***	Sibling
Ch-101	Ch-071	10	2	NA	0.71	NA	***	***	***	Sibling
Ch-093	Ch-024 <sup>15</sup>	11	0	95%	0.21	***	*	***	***	Mother
Ch-093	Ch-034 <sup>15</sup>	11	2	NA	0.02	NA	*	***	NS	Sibling
Ch-093	Ch-058 <sup>15</sup>	11	2	NA	0.06	NA	NS	*	NS	Sibling
Ch-110	Ch-093	11	0	95%	0.31	***	*	***	***	Mother
Ch-092	Ch-093	11	3	NA	0.36	NA	***	*	*	Other kin
Ch-110	Ch-024	11	1	NA	0.28	NA	*	*	***	Grandmothe
Ch-092	Ch-024	11	2	NA	-0.01	NA	NS	*	*	Other kin
Ch-110	Ch-092	11	3	NA	-0.06	NA	NS	NS	NS	None
Ch-033	Ch-093	11	1	NA	0.23	NA	*	*	*	Other kin
Ch-033	Ch-092	11	2	NA	0.08	NA	NS	NS	NS	None
Ch-033	Ch-024	11	4	NA	-0.09	NA	NS	NS	NS	None
Ch-033	Ch-110	11	3	NA	-0.02	NA	NS	NS	NS	None
Ch-079	Ch-064	13	0	80%	0.36	*	*	*	*	Mother
Ch-100	Ch-064	13	0	80%	0.43	*	*	NS	NS	Mother or other close ki
Ch-100	Ch-079	13	2	NA	0.36	NA	NS	NS	NS	Sibling or other kin
Ch-109	Ch-084	13	0	95%	0.67	*	*	*	*	Sibling or other kin
Ch-084	Ch-048 <sup>16</sup>	13	0	NS	0.09	NS	NS	NS	NS	None
Ch-109	Ch-048	13	2	NA	-0.13	NA	NS	NS	NS	None

The most recent community of residence of the Target and Possible Kin chimpanzee is coded by color (Kalande, orange;

Kasekela, brown; Mitumba, blue). Females are in bold while males are in non-bold italics.

<sup>2</sup>MT Haplotype, numbers indicate the mitochondrial DNA haplotype of both the Target and Possible Kin as previously reported [2].

<sup>3</sup>Number of Mismatches, number of microsatellite allelic mismatches between the Target/Possible Kin dyad.

<sup>4</sup>CERVUS Parentage Confidence Level, the relaxed confidence level from CERVUS (80%) and the strict confidence level (95%); most likely, the individual is the strongest candidate parent but did not fit the confidence level criteria; NS, CERVUS did not find a relationship between the dyad; NA, the pair was not tested as parent-offspring in <sup>5</sup>KINSHIP Relatedness (R), the dyadic relatedness value for the Target and Possible Kin from KINSHIP. Values should be approximately 0.50 for parent-offspring and full

<sup>6</sup>KINSHIP Parent-Offspring, significance from KINSHIP for the relationship; asterisks indicate p-value: \*\*\* P < 0.001; \* P ≤ 0.05; NA, the pair was not tested as parent-offspring

KINSHIP due to allelic mismatches or previously known parent-offspring relationships; NS, not significant.
KINSHIP Full Sibling, significance level from KINSHIP for the relationship.
KINSHIP Maternal Half Sibling, significance level from KINSHIP for the relationship.

<sup>10</sup> (KINSHIP Paternal Half Sibling, significance level from KINSHIP for the relationship. <sup>10</sup> Maternity and paternity are both known for Ch-077 and neither parent is Ch-081. Ch-077 was below reproductive age and was not considered as a potential parent to Ch-

081. <sup>11</sup>It is possible, but unlikely, for a father to be from within the same haplotype: of 39 known paternities to date, only two were between parents sharing the same haplotype (Wroblewski, unpublished data), and one of which was an unusual case of inbreeding [33]. <sup>12</sup>Ch-021 is the known mother to Ch-103.

<sup>13</sup>Ch-050 is the known mother to Ch-052 and Ch-061; neither Ch-052 nor Ch-061 were of age to be considered as potential parents to Ch-095. <sup>14</sup>Parent for Target identified by CERVUS was not the Possible Kin.

<sup>15</sup>Ch-024 is the known mother to Ch-034 and Ch-058.

<sup>16</sup>Maternity was known for Ch-048 and it was not Ch-084.