

1 **Table S1. Naturally contaminated DNA samples studied by “GD1 C & D”, “GD2 C, D &**
 2 **mosaic” arrays and LC-480 real-time PCR.**

3 ^a: Cts are calculated based on average Ct values of C-I and C-II for type C or D-I and D-II for
 4 type D.

5 ^b: Cts are calculated based on average Ct values of C-II and D-III for type C-D or D-II, D-C and
 6 C-III for type D-C.

7 ^c: Cts as calculated by the LC-480 software.

8 ^d: Types C and C-D are confirmed with oligos published in *Hill et al. (25)*.

9 ^e: Types D and D-C are confirmed with oligos published in *Kouguchi et al. (28)*.

10 (-) indicates a negative result.

11 SMB: Standard mouse bioassay.

12 NT: Not tested.

13 Discordant PCR results are bolded in grey.

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Origin	Sample	Country	SMB	GD1		GD2		Reference PCR (25, 28)	
				<i>bont</i> type	Ct ^a	<i>bont</i> type	Ct ^b	<i>bont</i> type	Ct ^c
Avian	Feces	France	NT	C	32.13	C-D	33.30	C ^d	34.69
				D	31.69	D-C	33.71	D ^e	33.61
Bovine	Feces	France	NT	C	35.99	C-D	36.63	C ^d	37.84
				D	37.64	D-C	36.97	D ^e	37.81
Bovine	Feces	France	NT	C	33.64	C-D	32.96	C ^d	33.36
Bovine	Feces	Italy	-	C	28.07	C-D	26.94	C ^d	28.84
Bovine	Feces	France	NT	D	21.04	D-C	24.96	D ^e	22.56
Bovine	Feces	France	NT	D	21.13	D-C	21.83	D ^e	20.77
Bovine	Feces	France	NT	D	25.61	D-C	25.87	D ^e	24.23
Bovine	Feces	France	NT	D	22.91	D-C	24.08	D ^e	22.97
Bovine	Feces	France	NT	D	21.31	D-C	22.87	D ^e	22.87
Bovine	Feces	France	NT	D	28.17	D-C	28.86	D ^e	25.93
Bovine	Feces	Italy	D	D	26.12	D-C	25.91	D ^e	25.04
Bovine	Feces	Italy	D	D	23.91	D-C	23.06	D ^e	24.5
Bovine	Feces	France	NT	D	27.72	D-C	28.53	D ^e	27.64
Bovine	Feces	France	NT	D	33.56	D-C	34.78	D ^e	37.85
Bovine	Feces	France	NT	-	0	-	0	-	0
Bovine	Feces	France	NT	-	0	-	0	-	0

Bovine	Feces	France	NT	-	0	-	0	-	0
Bovine	Feces	France	NT	-	0	-	0	-	0
Bovine	Feces	France	NT	-	0	-	0	-	0
Bovine	Feces	France	NT	-	0	-	0	-	0
Bovine	Feces	France	NT	-	0	-	0	-	0
Bovine	Feces	Italy	-	-	0	-	0	-	0
Bovine	Feces	Italy	-	-	0	-	0	-	0
Bovine	Feces	Italy	-	-	0	-	0	-	0
Bovine	Feces	Italy	-	-	0	-	0	-	0
Bovine	Feces	Italy	-	-	0	-	0	-	0
Bovine	Feces	Italy	-	-	0	-	0	-	0
Bovine	Feces	Italy	-	-	0	-	0	-	0
Bovine	Feces	France	NT	-	0	-	0	-	0
Bovine	Feces	France	NT	-	0	-	0	-	0
Bovine	Feces	France	NT	-	0	-	0	-	0
Bovine	Intestine	Netherlands	C & D	D	22.94	D-C	23.98	D ^e	24.87
Bovine	Intestine	Italy	D	D	29.09	D-C	29.18	D ^e	28.75
Bovine	Intestine	Italy	-	-	0	-	0	-	0
Bovine	Intestine	Italy	-	-	0	-	0	-	0
Bovine	Liver	Italy	D	D	25	D-C	24.02	D ^e	25.41
Bovine	Liver	Italy	-	-	0	-	0	-	0
Bovine	Liver	Italy	-	-	0	-	0	-	0
Bovine	Rumen	Italy	D	C	33.5	C-D	31.71	C ^d	35.95
Bovine	Rumen	Italy	D	D	24.71	D-C	23.68	D ^e	25.1
Bovine	Rumen	Italy	D	D	32.02	D-C	32.42	D ^e	32.52
Bovine	Rumen	Italy	-	D	32.7	D-C	33.17	D ^e	33.07
Bovine	Rumen	Italy	-	-	0	-	0	-	0
Bovine	Rumen	Italy	-	-	0	-	0	-	0
Bovine	Rumen	Netherlands	D	-	0	-	0	-	0
Bovine	Spleen	Italy	-	C	31.08	C-D	30.72	C ^d	32.49
Bovine	Spleen	Italy	D	D	28.77	D-C	27.71	D ^e	29.37
Bovine	Udder	Italy	-	-	0	-	0	-	0
Bovine	Udder	Italy	-	-	0	-	0	-	0
Bovine	Udder	Italy	-	-	0	-	0	-	0
Bovine	NA	France	NT	-	0	-	0	D ^e	38.18
Bovine	NA	France	NT	-	0	-	0	-	0
Bovine	NA	France	NT	-	0	-	0	-	0
Bovine	NA	France	NT	-	0	-	0	-	0
Bovine	NA	France	NT	-	0	-	0	-	0
Bovine	NA	France	NT	-	0	-	0	-	0

Bovine	NA	France	NT	-	0	-	0	-	0
Bovine	NA	France	NA	-	0	-	0	-	0
Coot	Intestine	Italy	C	C	25.36	C-D	24.52	C ^d	26.41
Coot	Intestine	Italy	-	D	26.95	D-C	25.8	D ^e	27.25
Coot	Intestine	Italy	-	-	0	-	0	-	0
Coot	Intestine	Italy	-	-	0	-	0	-	0
Coot	Intestine	Italy	-	-	0	-	0	-	0
Coot	Liver	Italy	C	C	24.83	C-D	25.33	C ^d	26.43
Coot	Liver	Italy	-	-	0	-	0	-	0
Coot	Liver	Italy	-	-	0	-	0	-	0
Coot	Liver	Italy	-	-	0	-	0	-	0
Coypus	Intestine	Italy	C	C	22.46	C-D	23.53	C ^d	23.17
Coypus	Intestine	Italy	C	C	28.8	C-D	28.3	C ^d	28.77
Coypus	Liver	Italy	C	C	24.73	C-D	22.99	C ^d	24.93
Dog	Feces	Italy	C	C	26.3	C-D	25.55	C ^d	27.08
				D	26.33	D-C	25.73	D ^e	27.12
Dog	Feces	Italy	C	C	25.5	C-D	24.63	C ^d	26.4
				D	26.12	D-C	25.47	D ^e	27.01
Egret	Intestine	Italy	C	C	24.36	C-D	24.04	C ^d	25.57
Egret	Liver	Italy	C	C	24.7	C-D	24.86	C ^d	26.28
Egret	Maggot	Italy	C	C	24.75	C-D	24.25	C ^d	25.59
Environment	Forage	Italy	-	-	0	-	0	-	0
Environment	Maggot	Italy	C	C	24.11	C-D	22.87	C ^d	24.62
Environment	Mood	Italy	C	C	28.17	C-D	27.57	C ^d	29.66
Environment	Mood	Italy	-	-	0	-	0	-	0
Environment	Soil	Italy	C	C	25.82	C-D	25.22	C ^d	26.51
Environment	Soil	Italy	-	C	31.46	C-D	30.42	C ^d	33.09
Environment	Soil	Italy	-	C	29.08	C-D	32.12	C ^d	37.23
Environment	Soil	Italy	-	-	0	-	0	-	0
Environment	Soil	Italy	-	-	0	-	0	-	0
Environment	Soil	Netherlands	NT	-	0	-	0	-	0
Environment	Soil	Netherlands	NT	-	0	-	0	-	0
Environment	Soil	Netherlands	NT	-	0	-	0	-	0
Environment	Vegetable	Italy	-	C	34.86	C-D	31.82	C ^d	36.11
Environment	Vegetable	Italy	-	-	0	-	0	-	0
Environment	Vegetable	Italy	-	-	0	-	0	-	0
Environment	Vegetable	Italy	-	-	0	-	0	-	0
Feed		France	NT	-	0	-	0	-	0
Feed		France	NT	-	0	-	0	-	0

Feed		France	NT	-	0	-	0	-	0
Feed		Netherlands	C	C	26.76	C-D	26.5	C ^d	26.78
Feed		Netherlands	-	-	0	-	0	-	0
Feed		Netherlands	-	-	0	-	0	-	0
Feed s		Netherlands	-	-	0	-	0	-	0
Gallus	Droppings	France	NT	-	0	-	0	-	0
Gallus	Droppings	France	NT	-	0	-	0	-	0
Gallus	Feces	France	NT	C	31.91	C-D	32.66	C ^d	37.34
Gallus	Feces	France	NT	C	33.48	C-D	32.87	C ^d	36.11
Gallus	Feces	France	NT	C	37.11	C-D	35.16	C ^d	35.85
Gallus	Feces	France	NT	C	32.81	C-D	34.14	C ^d	34.51
Gallus	Feces	France	NT	C	30.59	C-D	29.37	C ^d	33.82
Gallus	Feces	France	NT	D	33	D-C	34.42	-	0
Gallus	Feces	France	NT	-	0	-	0	-	0
Gallus	Feces	France	NT	-	0	-	0	-	0
Gallus	Intestine	Italy	-	-	0	-	0	-	0
Gallus	Serum	France	NT	C	37.51	C-D	37.1	C ^d	36.44
Gallus	Serum	France	NT	-	0	-	0	-	0
Gallus	NA	France	D	C	24.92	C-D	24.7	C ^d	24.89
Gallus	NA	France	NT	C	33.35	C-D	35.1	C ^d	34.39
Gallus	NA	France	NT	C	33.85	C-D	34.05	C ^d	36.1
Gallus	NA	France	NT	C	32.39	C-D	33.41	C ^d	35.28
Gallus	NA	France	NT	C	24.06	C-D	25.74	C ^d	30.05
Gallus	NA	France	NT	C	32.63	C-D	34.02	C ^d	36.04
Gallus	NA	France	NT	C	37.22	C-D	36.03	C ^d	37.88
Gallus	NA	France	NT	C	26.47	C-D	25.02	C ^d	26.12
Gallus	NA	France	NT	C	32.03	C-D	33.69	C ^d	34.25
Gallus	NA	France	NT	C	33.2	C-D	32.65	C ^d	33.63
Gallus	NA	France	NT	C	32.2	C-D	32.06	C ^d	36.03
Gallus	NA	France	NT	C	19.57	C-D	20.81	C ^d	21.54
Gallus	NA	France	NT	C	25.77	C-D	26.65	C ^d	27.08
Gallus	NA	France	NT	C	31.87	C-D	32.56	C ^d	32.01
Gallus	NA	France	NT	C	33.35	C-D	33.94	C ^d	38.21
Gallus	NA	France	NT	C	27.77	C-D	27.03	C ^d	29.95
Gallus	NA	France	NT	D	33.13	D-C	32.18	D ^e	34.25
Gallus	NA	France	NT	D	33.35	D-C	32.79	D ^e	33.58
Gallus	NA	France	NT	-	0	-	0	C ^d	37.73
Gallus	NA	France	D	-	0	-	0	-	0

Gallus	NA	France	NT	-	0	-	0	-	0
Gallus	NA	France	NT	-	0	-	0	-	0
Gallus	NA	France	NT	-	0	-	0	-	0
Gallus	NA	France	NT	-	0	-	0	-	0
Gallus	NA	France	NT	-	0	-	0	-	0
Gallus	NA	France	NT	-	0	-	0	-	0
Goose	Feces	France	NT	-	0	-	0	-	0
Goose	Intestine	Italy	-	-	0	-	0	-	0
Goose	Liver	Italy	-	C	28.18	C-D	26.92	C ^d	28.7
Guinea fowl	Feces	France	NT	C	33.25	C-D	34.25	C ^d	33.12
Guinea fowl	Feces	France	NT	C	29.08	C-D	30.45	C ^d	34.59
Guinea fowl	Feces	France	C & D	-	0	-	0	-	0
Guinea fowl	NA	France	D	-	0	-	0	-	0
Guinea fowl	NA	France	NT	-	0	-	0	-	0
Heron	Intestine	Italy	C	C	27.8	C-D	26.15	C ^d	29.52
Heron	Intestine	Italy	-	D	27.03	D-C	25.62	D ^e	27.36
Herring gull	Intestine	Italy	C	C	27.8	C-D	24.95	C ^d	31.45
Herring gull	Intestine	Italy	C	C	27.01	C-D	25.72	C ^d	27.88
Herring gull	Intestine	Italy	C	C	26.18	C-D	25.15	C ^d	27.16
Herring gull	Liver	Italy	C	C	27.11	C-D	26.13	C ^d	37.76
Herring gull	Liver	Italy	C	C	24.85	C-D	23.71	C ^d	25.33
Herring gull	Liver	Italy	C	C	25.44	C-D	25.6	C ^d	27.22
Horse	Caecum	Italy	B	-	0	-	0	-	0
Horse	Caecum	Italy	B	-	0	-	0	-	0
Horse	Feces	France	NT	-	0	-	0	-	0
Horse	Intestine	Netherlands	C	-	0	-	0	-	0
Horse	Intestine	Italy	B	-	0	-	0	-	0
Kit buffer	Negative control	Netherlands	-	-	0	-	0	-	0
Maggot	Maggot	Italy	C	C	27.44	C-D	25.92	C ^d	27.9
Mallard	Intestine	Italy	C	C	24.29	C-D	23.18	C ^d	24.75
Mallard	Intestine	Italy	C	C	28.83	C-D	25.61	C ^d	29.95
Mallard	Intestine	Italy	C	C	27.17	C-D	24.73	C ^d	28.6
Mallard	Intestine	Italy	C	C	27.99	C-D	27.66	C ^d	28.83
Mallard	Intestine	Italy	C	C	27.42	C-D	27.07	C ^d	29.1
Mallard	Intestine	Italy	C	C	23	C-D	22.64	C ^d	23.61
Mallard	Intestine	Italy	C	C	22.71	C-D	25.41	C ^d	23.8
Mallard	Liver	Italy	C	C	22.49	C-D	22.34	C ^d	24.77
Mallard	Liver	Italy	C	C	27.86	C-D	26.75	C ^d	28.99

Mink	Feed	Netherlands	C	C	34.52	C-D	33.55	C ^d	36.24
Mink	Feed	Netherlands	D	D	23.48	D-C	23.82	D ^e	24.25
Mink	Feed	Netherlands	D	D	34.45	D-C	34.84	D ^e	35.25
Mink	Feed	Netherlands	C & D	-	0	-	0	-	0
Mink	Feed	Netherlands	C	-	0	-	0	-	0
Mink	Feed	Netherlands	-	-	0	-	0	-	0
Mink	Feed	Netherlands	D	-	0	-	0	-	0
Mink	Feed	Netherlands	-	-	0	-	0	-	0
Mink	Feed	Netherlands	-	-	0	-	0	-	0
Mink	Feed	Netherlands	-	-	0	-	0	-	0
Mink	Feed	Netherlands	-	-	0	-	0	-	0
Mink	Feed	Netherlands	C	-	0	-	0	-	0
Mink	Feed	Netherlands	-	-	0	-	0	-	0
Moorhen	Intestine	Italy	-	C	23.58	C-D	24.06	C ^d	25.61
Moorhen	Intestine	Italy	-	-	0	-	0	-	0
Moorhen	Liver	Italy	-	-	0	-	0	-	0
Partridge	NA	France	NT	C	33.01	C-D	29.97	C ^d	30.53
Peewit gull	Intestine	Italy	C	C	22.84	C-D	23.62	C ^d	23.6
Peewit gull	Intestine	Italy	-	C	31.51	C-D	30.3	C ^d	32.75
Peewit gull	Intestine	Italy	-	C	23.69	C-D	23.45	C ^d	25.44
Peewit gull	Intestine	Italy	-	-	0	-	0	-	0
Peewit gull	Intestine	Italy	-	-	0	-	0	-	0
Peewit gull	Liver	Italy	C	C	25.93	C-D	24.6	C ^d	26.58
Peewit gull	Liver	Italy	C	C	27.52	C-D	26.76	C ^d	28.75
Peewit gull	Liver	Italy	-	C	33.18	C-D	31.38	C ^d	34.09
Peewit gull	Liver	Italy	-	-	0	-	0	-	0
Peewit gull	Liver	Italy	-	-	0	-	0	-	0
Peewit gull	Liver	Italy	-	-	0	-	0	-	0
Pheasant	Liver	Italy	C	C	20.79	C-D	21.41	C ^d	22.49
Pheasant	Intestine	Italy	C	C	21.7	C-D	21.92	C ^d	22.68
Pheasant	Spleen	Italy	C	C	22.97	C-D	22.87	C ^d	24.09
Pheasant	Spleen	Italy	C	D	31.04	D-C	30.99	D ^e	32.61
Pheasant	NA	France	NT	C	24.04	C-D	24.5	C ^d	25.42
Pigeon	Intestine	Italy	-	-	0	-	0	-	0
Pigeon	Stomach	Italy	-	-	0	-	0	-	0
Pochard	Intestine	Italy	C	C	27.46	C-D	26.39	C ^d	30.24
Pochard	Intestine	Italy	-	C	29.6	C-D	28.75	C ^d	30.34
Pochard	Intestine	Italy	-	-	0	-	0	-	0

Pochard	Liver	Italy	C	C	25.91	C-D	24.68	C ^d	26.34
Pochard	Liver	Italy	C	C	26.91	C-D	25.32	C ^d	28.11
Pochard	Liver	Italy	-	C	29.89	C-D	28.52	C ^d	30.74
Poultry	Feces	France	D	-	0	-	0	-	0
Poultry	Feces	France	NT	-	0	-	0	-	0
Poultry	NA	France	NT	C	32.49	C-D	33.9	C ^d	37.08
Poultry	NA	France	NT	-	0	-	0	-	0
Rabbit	Intestine	Italy	-	C	31.12	C-D	30.66	C ^d	32.25
Rabbit	Intestine	Italy	-	-	0	-	0	-	0
Rabbit	Intestine	Italy	-	-	0	-	0	-	0
Rabbit	Intestine	Italy	-	-	0	-	0	-	0
Rabbit	Intestine	Italy	-	-	0	-	0	-	0
Rabbit	Intestine	Italy	-	-	0	-	0	-	0
Rabbit	Intestine	Italy	-	-	0	-	0	-	0
Rabbit	Intestine	Italy	-	-	0	-	0	-	0
Rabbit	Intestine	Italy	-	-	0	-	0	-	0
Rabbit	Intestine	Italy	-	-	0	-	0	-	0
Rat	Intestine	Italy	C	C	29.9	C-D	29.44	C ^d	29.87
Rat	Intestine	Italy	C	C	22.39	C-D	22.93	C ^d	23.78
Rat	Intestine	Italy	-	-	0	-	0	-	0
Rat	Intestine	Italy	-	-	0	-	0	-	0
Rat	Liver	Italy	C	C	23	C-D	24.24	C ^d	23.82
Raw material	NA	France	NT	-	0	-	0	-	0
Swan	Liver	Netherlands	C	C	33.06	C-D	33.83	C ^d	36.32
Turkey	Feces	France	NT	C	36.7	C-D	36.12	C ^d	36.25
Turkey	Feces	France	NT	-	0	-	0	C ^d	36.49
Turkey	Feces	France	NT	-	0	-	0	C ^d	36.71
Turkey	Feces	France	NT	-	0	-	0	-	0
Turkey	Feces	France	NT	-	0	-	0	-	0
Turkey	Feces	France	NT	-	0	-	0	-	0
Turkey	Feces	France	D	-	0	-	0	-	0
Turkey	NA	France	NT	C	35.82	C-D	33.97	C ^d	34.54
Turkey	NA	France	NT	D	36.26	D-C	36.53	D ^e	36.93
Turkey	NA	France	NT	C	34.52	C-D	35.99	C ^d	35.82
Turkey	NA	France	NT	C	31.04	C-D	30.59	C ^d	31.2
Turkey	NA	France	NT	-	0	-	0	C ^d	38.03
Turkey	NA	France	NT	-	0	-	0	-	0
Turkey	NA	France	NT	-	0	-	0	-	0
Turkey	NA	France	NT	-	0	-	0	-	0
Turkey	NA	France	NT	-	0	-	0	-	0

Turkey	NA	France	C & D	-	0	-	0	-	0
Turkey	NA	France	NT	-	0	-	0	-	0
Turkey	NA	France	NT	-	0	-	0	-	0
Turkey	NA	France	D	-	0	-	0	-	0
Wild duck	Feces	France	NT	C	23.97	C-D	25.36	C ^d	26.33
Wild duck	Feces	France	NT	C	29.73	C-D	31.52	C ^d	32.97
Wild duck	Feces	France	NT	C	27.34	C-D	28.35	C ^d	28.61
Wild duck	Feces	Italy	C	C	28.39	C-D	27.76	C ^d	30.54
				D	27.41	D-C	26.48	D ^e	28.88
Wild duck	Feces	France	NT	-	0	-	0	-	0
Wild duck	Feces	France	NT	-	0	-	0	-	0
Wild duck	Feces	France	NT	-	0	-	0	-	0
Wild duck	Intestine	Italy	C	C	28.43	C-D	26.95	C ^d	30.5
Wild duck	Intestine	Italy	C	C	24.77	C-D	25.11	C ^d	26.37
Wild duck	Intestine	Italy	C	C	25.88	C-D	25.39	C ^d	26.6
Wild duck	Intestine	Italy	C	C	26.69	C-D	25.56	C ^d	27.37
Wild duck	Intestine	Italy	C	C	23.92	C-D	23.07	C ^d	24.99
Wild duck	Intestine	Italy	C	C	24.11	C-D	23.81	C ^d	25.14
				D	28.05	D-C	26.68	D ^e	28.7
Wild duck	Intestine	Italy	C	C	24.91	C-D	23.75	C ^d	25.3
Wild duck	Intestine	Italy	C	C	22.97	C-D	24.63	C ^d	23.84
Wild duck	Intestine	Italy	C	C	29.38	C-D	29.4	C ^d	30.74
Wild duck	Intestine	Italy	C	C	24.78	C-D	23.97	C ^d	26.47
Wild duck	Intestine	Italy	C	C	30.96	C-D	30.4	C ^d	30.78
Wild duck	Intestine	Italy	C	C	27.65	C-D	27.41	C ^d	27.92
Wild duck	Intestine	Italy	C	C	26.81	C-D	26.79	C ^d	27.68
Wild duck	Intestine	Italy	C	C	31.56	C-D	30.95	C ^d	32.45
Wild duck	Intestine	Italy	-	-	0	-	0	-	0
Wild duck	Intestine	Italy	-	-	0	-	0	-	0
Wild duck	Intestine	Italy	-	-	0	-	0	-	0
Wild duck	Intestine	Italy	-	-	0	-	0	-	0
Wild duck	Intestine	Italy	-	-	0	-	0	-	0
Wild duck	Liver	Italy	C	C	27.43	C-D	26.61	C ^d	28.86
Wild duck	Liver	Italy	C	C	22.54	C-D	23.12	C ^d	23.97
Wild duck	Liver	Italy	C	C	29.99	C-D	28.8	C ^d	31.06
Wild duck	Liver	Italy	C	C	25.77	C-D	24.77	C ^d	26.23
Wild duck	Liver	Italy	C	C	27.12	C-D	25.5	C ^d	27.56
Wild duck	Liver	Italy	C	C	26.81	C-D	26.27	C ^d	26.75

Wild duck	Liver	Italy	C	C	26.75	C-D	25.83	C ^d	26.55
Wild duck	Liver	Italy	-	C	32.73	C-D	32.33	C ^d	35.27
Wild duck	Liver	Italy	-	-	0	-	0	-	0
Wild duck	Liver	Netherlands	C	-	0	-	0	-	0
Wild duck	NA	France	NT	C	37.81	C-D	36.21	C ^d	37
Wild duck	NA	France	NT	D	33.17	D-C	33.46	D ^e	31.93
Wild duck	NA	France	NT	-	0	-	0	-	0
Wild duck	NA	France	NT	-	0	-	0	-	0
Wild duck	NA	France	NT	-	0	-	0	-	0
Wild duck	NA	France	NT	-	0	-	0	-	0
Wild duck	NA	France	NT	-	0	-	0	-	0

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