

Molecular identification of *Cryptosporidium*, *Giardia*, and *Blastocystis* from stray and household cats and cat owners in Tehran, Iran

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Supplementary information

Supplementary Table 1. The multiple alignments nucleotide sequences of SSU rDNA fragment of *Cryptosporidium felis* isolated in this study with reference sequences retrieved from GenBank represent the position of intra- species substitutions in *Cryptosporidium felis*.

Isolate/access no	Nucleotide position	
	198	228
<i>Cryptosporidium felis</i> (AF108862)	T	T
<i>Cryptosporidium felis</i> (KC734573)	.	.
<i>Cryptosporidium felis</i> (FJ707310)	A	-
<i>Cryptosporidium felis</i> (JN833576)	A	-
SC11, SC20	.	.
SC7, SC22, SC24, SC64, SC76	A	-

Supplementary Table 2. Multiple alignments sequences of assemblage B reference sequences genotypes of *Giardia duodenalis* retrieved from GenBank, with assemblage B isolate in this study at the β -giardin (*bg*) locus.

Isolate/access no	Nucleotide position from the start of the gene										
	185	210	228	273	327	354	357	438	471	564	609
AY072725-BIV-B1	T	T	A	A	T	T	T	T	C	T	C
AY072726-BIII-B2	.	C	.	G	C	C	C	C	.	.	.
AY072727-BIV-B3	.	C	.	.	C	C	.	C	.	.	.
AY072728-BIV-B4	.	C	G	.	C	.	.	C	.	C	T
AY647265-BIV-B5	.	C	.	.	C	.	.	C	T	.	.
AY647266-BIV-B6	C	.	.	.	C	C	.	C	.	.	.
SC101	.	.	.	.	C	C	.	C	.	.	.

Numbers represent the nucleotide position of intra-genotypic substitutions in BIV and BIII sub-assemblages and genotypes [1, 2]. Dots indicate nucleotide identity to the sub-assemblages BIV, genotype B1 (AY072726) reference sequences.

References

1. Wieringa CM, Thompson RCA. Comparative evaluation of *Giardia duodenalis* sequence data. Parasitology. 2007;134(12):1795–821. Epub 06/01. doi: 10.1017/S0031182007003071.
2. Cacciò SM, Beck R, Lalle M, Marinculic A, Pozio E. Multilocus genotyping of *Giardia duodenalis* reveals striking differences between assemblages A and B. Int J Parasitol. 2008;38(13):1523–31.

Supplementary Table 3. The multiple alignments of the SSU rDNA nucleotide fragment sequences of ST1, ST2, ST3, ST5, ST7, and ST10 of *Blastocystis* isolated in this study with reference sequences retrieved from GenBank, represent the position of intra-nucleotide substitutions in *Blastocystis* subtypes isolates.

Isolate/access no																	
ST1		172	195	247	260												
U51151		G	C	C	C												
MK801411		A	T	T	G												
SC15, SC27, SC29, H15, H23		A	T	T	.												

ST2		15	171	174	175	177	178	180	181	184	186	188	192	193	194	195	196	197
EU445491		A	A	A	G	A	C	G	A	T	A	C	A	C	T	G	C	T
AB107669		T	G	C	A	G	A	A	G	A	T	T	G	T	G	T	T	C
H8, H27		T	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

ST3		164	261
AB107963		A	C
AB107965		.	G
H10, H18, H21		G	.
H24		.	G

ST5		176	185	186	187	385
AB107964		G	A	A	T	A
AB107966		.	T	.	.	.
SC80		.	.	.	.	G

ST10	169	171	173	175	185	192	196	197	198	199	201	202
KC148207	C	C	A	G	A	C	T	A	G	C	T	C
SC104	G	T	G	C	T	G	C	T	C	T	C	T

ST7	182	193	194	198	201	203	204	209	210	219	227	228	230	231	232	233	234	236	237	238	239	241	243	249	250	251	252	253	254	255	256	257	259	269	301	302	306	307	308	309	312	314	321
AF408427	T	A	T	A	T	T	A	A	G	A	G	G	T	G	C	C	T	A	G	C	T	T	T	G	T	T	A	G	G	G	T	A	T	A	A	G	T	T	T	A	C	-	A
AB070991	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	T	C	G	A	T	.	C	.	.	.	.	.	.	.	.	.	.	.	G	.	-	-	-	-	G	.	-	G
H19	A	T	A	G	C	C	.	G	A	T	A	A	C	T	.	A	A	.	A	T	C	C	C	A	C	.	.	T	T	.	A	G	C	T	.	.	-	-	-	.	G	T	.
H29	A	T	A	G	C	C	T	G	A	T	A	A	.	A	T	A	A	G	T	A	C	.	.	T	.	C	G	T	T	A	.	.	C	T	.	A	-	-	-	.	G	T	.