

Gastric Submucosal Tumor in Patient Infected with *Dioctophyme renale* Roundworm, South Korea, 2024

Appendix

Appendix Table. List of primers and *Dioctophyme renale*- and *Gnathostoma spinigerum*-specific PCR results*

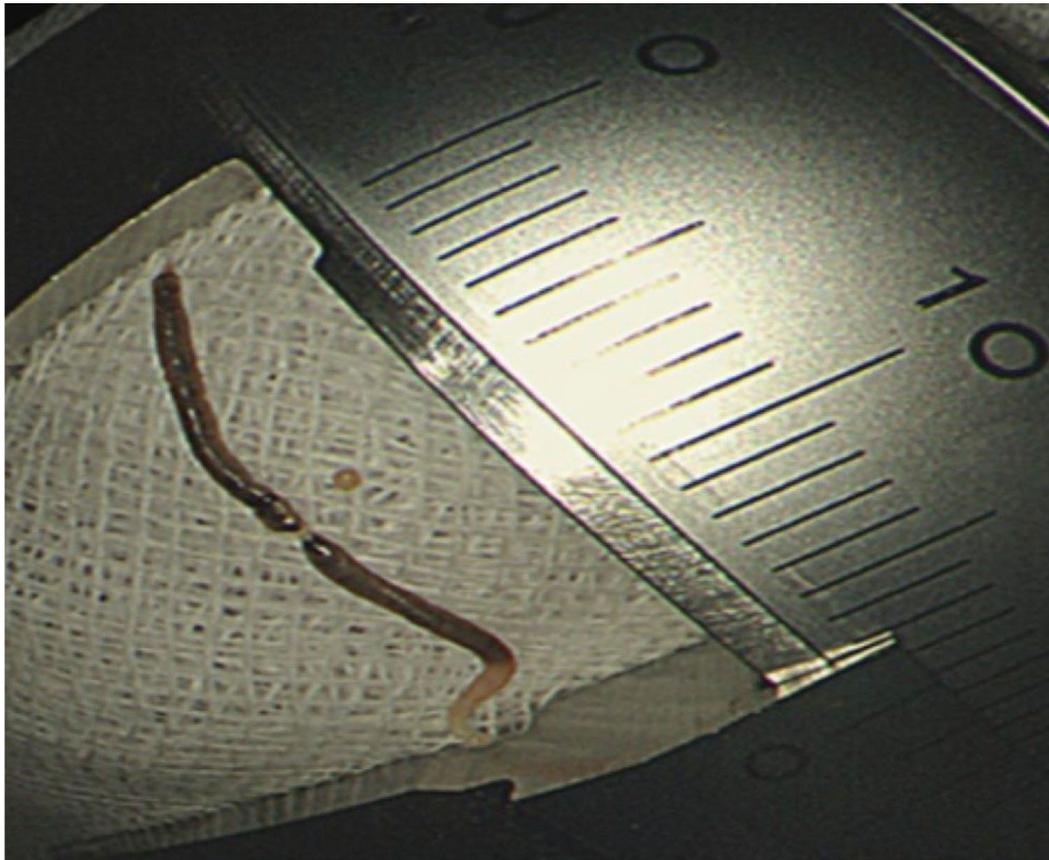
Target gene	Target species	Primers	Sequence 5'-3'	Size, bp	PCR	Reference	PCR result	GenBank accession no.
SSU rRNA	<i>Dioctophyme renale</i>	710F	ACTGCATCTTGGGCTTCGATG	1,150	N-PCR: 1st	This study		
		1860R	ACTTTCCCAACGCAACAGCC			This study		
	<i>Dioctophyme renale</i> , <i>Gnathostoma spinigerum</i>	850F	ATGGAGAAGGACCTCGGTTC	890	N-PCR: 2nd	This study	Positive	PP981196
		1740R	ATCAGTGCGAGCTCATGACC			This study		
		600F	AGAGGTGAAATCTTGGACCG	690	N-PCR: 1st	This study		
		1290R	CAAAGGGCAGGGACGTAATC			This study		
	695F	GATCAGATACCGCCCTAGTTC	550	N-PCR: 2nd	This study	Positive	PV168478	
	1245R	CTTACTGGGAATTCCTCGTTCAA			This study			
COX1	<i>Dioctophyme renale</i>	CO1_JB3-F	TTTTTTGGGCATCCTGAGGTTTAT	441	C-PCR	(1)	Negative	
		CO1_JB4.5-R	TAAAGAAAGAACATAATGAAAATG		N-PCR: 1st			
		DRCOX76F	TGGTGTGCTTGGTTGTTTTG	156	N-PCR: 2nd	(2)	Negative	
		DRCOX214R	AACCTGCCACCATACAAAG					
	<i>Gnathostoma spinigerum</i>	D.renale_COX1-10F	CATCCTGAGGTTTATATTCTAGC	410	N-PCR: 1st	This study		
		D.renale_COX1-420R	ATGACCCACTACATAATAAGTGTC			This study		
		D.renale_COX1-45F	GGTGTGATTTCTGAGAGAGTAAC	325	N-PCR: 2nd	This study	Negative	
		D.renale_COX1-370R	ATTCGCCAATGAAATGCCCGTTA			This study		
		COX1_JB3-626F	TTTTTTGGTCATCCTGAAGTTTAT	441	N-PCR: 1st	(1)†		
		COX1_JB4.5-1065R	TAAACTTAAACATAATGAAAATG					
<i>Dioctophyme renale</i>	Gn_COI_F	GCCTGC TTTTGG AATTGTTAG	250	C-PCR	(3)	Negative		
	Gn_COI_R	ACGAAAACCATACAAAGTAGCCAA		N-PCR: 2nd		Negative		
	D.renale_dory-795F	GCTGTCACTGGCAAGTGATA	1,249	N-PCR: 1st	This study			
	D.renale_dory-2044R	ACTTGCAATATTCCTGCGGTAC			This study			
	D.renale_dory-1037F	ACGCAGTGCTACAAGATGAGAG	626	N-PCR: 2nd	This study	Positive	Not submitted	
	D.renale_dory-1663R	AGGTACTTCAAGATGTCGGCG			This study			
ITS2	<i>Gnathostoma spinigerum</i>	GS ITS2_F	TGTGTCGATGAAGAACGCAG	650	C-PCR	(3)	Negative	
		GS ITS2_R	TTCTATGCTTAAATTCAGGGG					

*C-PCR, conventional PCR; N-PCR, nested PCR; SSU, small subunit.

†Sequence modified to match the *G. spinigerum* sequence.



Appendix Figure 1. Endoscopic ultrasonography visualized diffuse gastric wall thickening and disruption of the submucosal layer in the proximal antrum of the gastric wall.



Appendix Figure 2. A dark red roundworm measuring ≈ 1.8 cm was removed with forceps during a biopsy.

References

1. Eslahi AV, Mowlavi G, Houshmand E, Pirestani M, Majidiani H, Nahavandi KH, et al. Occurrence of *Dioctophyme renale* (Goeze, 1782) in road-killed canids of Iran and its public health implication. *Vet Parasitol Reg Stud Reports*. 2021;24:100568. [PubMed](#)
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