

附录1 本文涉及的SNP引物和微卫星引物

Appendix 1 Efficient SNP and microsatellite primers involved in this study

引物 Primer	预期条带 Expected band	扩增种类 Identified species	引物有效率 <sup>a</sup> Primer efficiency	跨物种扩增检测范围 <sup>b</sup> Cross-species testing range of primers	参考文献 Reference	使用顺序(鉴定杂交鲟父本时) Order of primer used in paternal identification of hybrid sturgeon
SI (F): GGAATTTTACAGTGATCTGATTAC (R): GGTCTGTAACACAGGTAATTATC	386 bp	SIN	100%	FUL, GUE, NAC, PER, RUT, SCH,	Boscari et al, 2014	—
F (F): CAGTGATCTGATTTTAAAGTAAAAAAG (R): ACACGAGTTCCGATTTTATTATA	521 bp	FUL	100%	SIN, STE, TRA, DAU, HUS, BAE	Boscari et al, 2014	—
N (F): GCCAATTTCAAAGTGATTTTGATT (R): ACACGAGTTCCGATTTTATTATA	227 bp	NAC	100%		Boscari et al, 2014	—
ST (F): TGTCACCTTTCAAAATTTGGTA (R): ATCCAAGTACAAGCTTGAACA	479 bp	STE	100%		Boscari et al, 2014	—
SD (F): GCCATTTCAAAATGTATTGGGG (R): ATCCAAGTACAAGCTTGAACA	223 bp	SCH, DAU	100%		Boscari et al, 2014	有预期条带时, 需再以引物 Ls19 和 SX226 进一步区分 SCH 和 DAU Identified SCH and DAU with primers Ls19 and SX226, if primer SD had the expected band
T (F): TGTGAAATTTAGATGATTTTAGTGC (R): GGTCTGTAACACAGGTAATTATC	246 bp	TRA	100%		Boscari et al, 2014	—
G (F): CCACAAAACAACAAAACATATGGAG (R): CCTTGGGCTAGTCTTCATGCC	395 bp	GUE, BAE, PER	96%		Havelka et al, 2019	—
H (F): CATAACATTGCACTGAATGTTATA (R): CTTTCGTTGATTTAGGGAAATGGT	600 bp	HUS	100%	PER <sup>c</sup>	Boscari et al, 2017	—
R (F): TAAGGGTCCATGCATGCAG (R): TTTTAGCTGCACCGTGGC	247 bp	RUT	100%	SIN, FUL, NAC <sup>d</sup>	Havelk et al, 2017	需在引物 SI、ST、F 没有预期条带时使用 Primer R can be used when primer SI, ST and F do not have the expected band
Ls19 <sup>e</sup> (F): CATCTTAGCCGTCTGTGGTAC (R): CAGGTCCTAATACAATGGC	126 bp/ 130 bp	SCH	100%	BAE, SCH, DAU	孔杰等, 2020	在引物 SD 有预期条带时, 鉴定 SCH SCH was identified when the primer SD had the expected band

Ls19 (F): CATCTTAGCCGTCTGTGGTAC	124 bp/	DAU	100%	BAE, SCH, DAU	孔杰等, 2020	在引物 SD 有预期条带时, 鉴定 DAU
(R): CAGGTCCCTAATAACAATGGC	127 bp					DAU was identified when the primer SD had the expected band
SX226 <sup>°</sup> (F): GGGGCTATCTGCTCCCATTA	185 bp	SCH	100%	BAE, SCH, DAU	孔杰等, 2020	在引物 SD 有预期条带时, 鉴定 SCH
(R): AGGCAGTTCACCCAGAAGTC						SCH was identified when the primer SD had the expected band
SX226 (F): GGGGCTATCTGCTCCCATTA	180 bp/	DAU	100%	NAE, SCH, DAU	孔杰等, 2020	在引物 SD 有预期条带时, 鉴定 DAU
(R): AGGCAGTTCACCCAGAAGTC	182 bp					DAU was identified when the primer SD had the expected band

<sup>a</sup> 引物有效率指该引物在对应物种中扩增出目的条带的可能性。<sup>b</sup> 跨物种扩增检测范围指该引物已进行扩增检测的鲟鱼种类范围, 表中引物的最大的跨物种扩增检测范围为 12 种鲟鱼。<sup>c</sup> 引物 H 跨物种扩增检测范围较 12 种鲟鱼缺少了 PER。<sup>d</sup> 引物 R 跨物种扩增检测范围较 12 种鲟鱼缺少了 NAC、SIN 和 FUL。<sup>e</sup> 引物 Ls19 和 SX226 需相互验证使用。物种缩写请见图 1。

<sup>a</sup> The primer efficiency refers to the possibility that the primer can amplify the expected band in the corresponding species. <sup>b</sup> Cross-species testing range refers to the range of sturgeon species that have been amplified by this primer. The maximum cross-species testing range of the primers in the table is 12 species of sturgeons. <sup>c</sup> Primer H did not amplify in PER of 12 species of sturgeons. <sup>d</sup> Primer R did not amplify in NAC, SIN and FUL of 12 species of sturgeons. <sup>e</sup> Primers Ls19 and SX226 need to verify each other. Full names of species abbreviations see Fig. 1.

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