

Table S4 Summary of the *Nini-IIβ* sequences amplified by 3UT1 and 3UT2 and long-range segments amplified by P1–P4, P6, and P7 for each haplotype

HT	Gene organization on each fragment								Structure
num.	3UT1	3UT2	P1	P2	P3	P4	P6	P7	
HT01			<i>COL11A2</i> –	<i>DAA</i> *01–	<i>DAB</i> *01– <i>DBA1</i> *01–	<i>DBA1</i> *01– <i>DBB1</i> *01–	<i>DBB2</i> *01– <i>DBA3</i> *01–		<i>COL11A2</i> – <i>DAA</i> *01– <i>DAB</i> *01–
	<i>DAB</i> *01	<i>DBB3</i> *01							<i>DBA1</i> *01– <i>DBB1</i> *01– <i>DBA2</i> *01–
			<i>DAA</i> *01	<i>DAB</i> *01	<i>DBB1</i> *01	<i>DBA2</i> *01 /	<i>DBB3</i> *01	<i>DBB3</i> *01– <i>BRD2</i>	<i>DBB2</i> *01– <i>DBA3</i> *01– <i>DBB3</i> *01– <i>BRD2</i>
	<i>DBB1</i> *01					<i>DBA2</i> *01– <i>DBB2</i> *01–			
						<i>DBA3</i> *01			
	<i>DBB2</i> *01								
HTs02	<i>DAB</i> *02	<i>DBB3</i> *01	<i>COL11A2</i> –	<i>DAA</i> *01–	<i>DAB</i> *02– <i>DBA2</i> *01–	<i>DBA2</i> *01– <i>DBB2</i> *02–	<i>DBB2</i> *02– <i>DBA3</i> *01–		<i>COL11A2</i> – <i>DAA</i> *01– <i>DAB</i> *02–
/06			<i>DAA</i> *01	<i>DAB</i> *02	<i>DBB2</i> *02	<i>DBA3</i> *01	<i>DBB3</i> *01	<i>DBB3</i> *01– <i>BRD2</i>	<i>DBA2</i> *01– <i>DBB2</i> *02– <i>DBA3</i> *01–
	<i>DBB2</i> *02								<i>DBB3</i> *01– <i>BRD2</i>
HTs03	<i>DAB</i> *03	<i>DBB3</i> *01	<i>COL11A2</i> –	<i>DAA</i> *01–	<i>DAB</i> *03– <i>DBA3</i> *01–		<i>DAB</i> *03– <i>DBA3</i> *01–		<i>COL11A2</i> – <i>DAA</i> *01– <i>DAB</i> *03–
/07			<i>DAA</i> *01	<i>DAB</i> *03	<i>DBB3</i> *01	-	<i>DBB3</i> *01	<i>DBB3</i> *01– <i>BRD2</i>	<i>DBA3</i> *01– <i>DBB3</i> *01– <i>BRD2</i>

HTs04		COL11A2–	DAA*01–					COL11A2–DAA*01–DAB*04–BRD2
-	DAB*04			-	-	-	DAB*04–BRD2	
/05		DAA*01	DAB*04					

- indicates no PCR product (i.e. gene deletion). Gene organizations of the entire “*COL11A2*–*BRD2*” region on seven haplotypes are shown in bold.