

```

<?xml version="1.0" encoding="UTF-8"?>
<hgx xmlns="http://histogenetics.com/schema/hgx-1.0.1.xsd" version="1.0.1"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<project name="">
<reporting-center code="" />
<sample id="sample id 1" center-code="" receive-date="20210709">
<typing>
<interpretation date="20211029">
<haploid locus="A" method="SBT" type="01:01:01" allele-number="1" />
<haploid locus="A" method="SBT" type="11:01:01" allele-number="2" />
<haploid locus="B" method="SBT" type="35:02:01" allele-number="1" />
<haploid locus="B" method="SBT" type="55:01:01" allele-number="2" />
<haploid locus="C" method="SBT" type="03:03:01" allele-number="1" />
<haploid locus="C" method="SBT" type="04:01:01" allele-number="2" />
<haploid locus="DRB1" method="SBT" type="11:18" allele-number="1" />
<haploid locus="DRB1" method="SBT" type="14:54:01" allele-number="2" />
<haploid locus="DRB3" method="SBT" type="02:02:01" allele-number="1" />
<haploid locus="DRB3" method="SBT" type="02:02:01" allele-number="2" />
<haploid locus="DRB4" method="SBT" type="NNNN" />
<haploid locus="DRB5" method="SBT" type="NNNN" />
<haploid locus="DQB1" method="SBT" type="05:03:01" allele-number="1" />
<haploid locus="DQB1" method="SBT" type="06:03:01" allele-number="2" />
<haploid locus="DPB1" method="SBT" type="02:01:02" allele-number="1" />
<haploid locus="DPB1" method="SBT" type="04:01:01" allele-number="2" />
<haploid locus="DQA1" method="SBT" type="01:04:01" allele-number="1" />
<haploid locus="DQA1" method="SBT" type="01:03:01" allele-number="2" />
<haploid locus="DPA1" method="SBT" type="01:03:01" allele-number="1" />
<haploid locus="DPA1" method="SBT" type="02:01:01" allele-number="2" />
<genotype-list>
<diploid-combination locus="A" technology="PacBio" db="HLADB" version="3.43.0">
<locus-block>
<allele-list allele-number="1">
<allele>01:01:01:01</allele>
<allele>01:01:01:22</allele>
<allele>.....</allele>
<allele>.....</allele>
<allele>02:01:01:17</allele>
<allele>02:01:01:19</allele>
</allele-list>
</locus-block>
</diploid-combination>
</genotype-list>
</interpretation>
<hla locus="A">
<amplification>
<sbt method="SMS" segment="intron17" segment-number="17" allele-number="1"
continuity="false">CTCCCCAGACGCCGAGGATGGCCGTCATGGCGCCCCGAACCTCCTCCTGCTACTCTCGGGGGCCCTGGCC
CTGACCCAGACCTGGGCGGGTGAGTGCGGGGTCGGGAGGGAAACCGCCTCTGCGGGGAGAAGCAAGGGGCC.....
.....AATTTGTTTCATGAATATTTTTTCTATAGTGAGACAGCTGCCTTGTGTGGGACTGAG</sbt>
<sbt method="SMS" segment="intron17" segment-number="17" allele-number="2"
continuity="false">CTCCCCAGACCCCGAGGATGGCCGTCATGGCGCCCCGAACCTCCTCCTGCTACTCTCGGGGGCCCTGGCC
CTGACCCAGACCTGGGCGGGTGAGTGCGGGGTCGGGAGGGAAACCGCCTCTGCGGGGAGAAGCAAGGGGCC.....
.....CTGCCTTGTGTGGGACTGAG</sbt>
</amplification>

```

```
</hla>
<hla locus="B">
<amplification>
<sbt method="SMS" segment="Intron16" segment-number="16" allele-number="1"
continuity="false">CACCCACCCGGACTCAGAATCTCCTCAGACGCCGAGATGCGGGTCACGGCGCCCCGAACCGTCTCCTGCT
GCTCTGGGGGGCAGTGGCCCTGACCGAGACCTGGGCCGGTGAGTGCAGGGTCGGGAGGGAAATGGCC.....
.....
....GCTCTGACCAGGTCCTGTTTTGTTCTACTCCAGCCAGCGACAGTGCCCAGGGCTCTGATGTGTCTCTCACAGCTTGA</sbt>
<sbt method="SMS" segment="Intron16" segment-number="16" allele-number="2"
continuity="false">CACCCACCCGGACTCAGAGTCTCCTCAGACACCGAGATGCGGGTCACGGCACCCCCGAACCTCCTCCTGCT
GCTCTGGGGGGCCTGGCCCTGACCGAGACCTGGGCCGGTGAGTGCAGGGTCGGGAGGGAAATGGCCTCTGTGGGGA.....
.....
TCCTGCGGGCTCTGACCAGGTCCTGTTTTGTTCTACTCCAGCCAGCGACAGTGCCCAGGGCTCTGATGTGTCTCTCACAGCTTGA
</sbt>
</amplification>
</hla>
<hla locus="C">
<amplification>
<sbt method="SMS" segment="Intron17" segment-number="17" allele-number="1"
continuity="false">CCGCAGTCCCGGTTCTGAAGTCCCAGTCACCCACCCGGACTCAGATTCTCCCAGACGCCGAGATGCGGG
TCATGGCGCCCCGAACCTCATCTGCTGCTCTCGGGAGCCCTGGCCCTGACCGAGACCTGGGCCGGTGAGTGCAG.....
.....
.....ATGACTGACCTGAATTTGTTTACTGACTATTGTGTTCTGTAGCCTGAGACAGCTG</sbt>
<sbt method="SMS" segment="Intron17" segment-number="17" allele-number="2"
continuity="false">CCGCAGTCCCGGTTCTAAAGTCCCAGTCACCCACCCGGACTCAGATTCTCCCAGACGCCGAGATGCGGG
TCATGGCGCCCCGAACCTCATCTGCTGCTCTCGGGAGCCCTGGCCCTGACCGAGACCTGGGCCGGTGAGTG.....
.....
.....TGAATTTGTTTACTGACTATTGTGTTCTGTAGCCTGAGACAGCTG</sbt>
</amplification>
</hla>
<hla locus="DRB1">
<amplification>
<sbt method="SMS" segment="Exon2" segment-number="2" allele-number="1"
continuity="false">CACGTTTCTTGAGTACTCTACGTCTGAGTGTCAATTTCTCAATGGGACGGAGCGGGTGCGGTTCTGGAC
AGATACTTCTATAACCAAGAGGAGTACGTGCGCTTCGACAGCGACGTGGGGGAGTCCGGGGCGGTGACGGAGCTGGGGCGGC
CTGATGAGGAGTACTGGAACAGCCAGAAGGACATCTGGAAGACAGGCGGGCCGCGGTGGACACCTACTGCAGACACAACACTAC
GGGTTGTGGAGAGCTTCACAGTGCAGCGGCGAG</sbt>
<sbt method="SMS" segment="Exon2" segment-number="2" allele-number="2"
continuity="false">CACGTTTCTTGAGTACTCTACGTCTGAGTGTCAATTTCTCAATGGGACGGAGCGGGTGCGGTTCTGGAC
AGATACTTCCATAACCAGGAGGAGTTCGTGCGCTTCGACAGCGACGTGGGGGAGTACCGGGCGGTGACGGAGCTGGGGCGGC
CTGCTGCGGAGCACTGGAACAGCCAGAAGGACCTCTGGAGCGGAGGCGGGCCGAGGTGGACACCTATTGCAGACACAACACTAC
GGGTTGTGGAGAGCTTCACAGTGCAGCGGCGAG</sbt>
<sbt method="SMS" segment="Exon3" segment-number="3" allele-number="1"
continuity="false">TCCATCCTAAGGTGACTGTGTATCCTTCAAAGACCCAGCCCCTGCAGCACCACAACCTCCTGGTCTGTTCTG
TGAGTGGTTTCTATCCAGGCAGCATTGAAGTCAGGTGGTTCGGGAATGGCCAGGAAGAGAAGACTGGGGTGGTGTCCACAGGC
CTGATCCACAATGGAGACTGGACCTTCCAGACCCTGGTGATGCTGGAACAGTTCCTCGGAGTGGAGAGGTTTACACCTGCCAA
GTGGAGACCCAAGCGTGACAAGCCCTCTCACAGTGGAAATGGA</sbt>
<sbt method="SMS" segment="Exon3" segment-number="3" allele-number="2"
continuity="false">TCCATCCTAAGGTGACTGTGTATCCTTCAAAGACCCAGCCCCTGCAGCACCACAACCTGCTGGTCTGTTCTG
TGAGTGGTTTCTATCCAGGCAGCATTGAAGTCAGGTGGTTCGGGAATGGCCAGGAAGAGAAGACTGGGGTGGTGTCCACAGGC
CTGATCCACAATGGAGACTGGACCTTCCAGACCCTGGTGATGCTGGAACAGTTCCTCGGAGTGGAGAGGTTTACACCTGCCAA
GTGGAGACCCAAGCGTGACAAGCCCTCTCACAGTGGAAATGGA</sbt>
<sbt method="SMS" segment="Exon4" segment-number="4" allele-number="1"
continuity="false">GAGCACGGTCTGAATCTGCACAGAGCAAGATGCTGAGTGGAGTCGGGGGCTTTGTGCTGGGCCTGCTCTT
CCTGGGGCCGGGCTGTTTACTTACTTCCAGGAATCAGAAAG</sbt>
```

```
<sbt method="SMS" segment="Exon4" segment-number="4" allele-number="2"
continuity="false">GAGCACGGTCTGAATCTGCACAGAGCAAGATGCTGAGTGGAGTCGGGGGCTTTGTGCTGGGCCTGCTCTT
CCTTGGGGCCGGGCTGTTACTACTTCAGGAATCAGAAAG</sbt>
<sbt method="SMS" segment="Exon5" segment-number="5" allele-number="1"
continuity="false">GACACTCTGGACTTCAGCCAAGAG</sbt>
<sbt method="SMS" segment="Exon5" segment-number="5" allele-number="2"
continuity="false">GACACTCTGGACTTCAGCCAAGAG</sbt>
<sbt method="SMS" segment="Exon6" segment-number="6" allele-number="1"
continuity="false">GATTCCTGAGCTGA</sbt>
<sbt method="SMS" segment="Exon6" segment-number="6" allele-number="2"
continuity="false">GATTCCTGAGCTGA</sbt>
</amplification>
</hla>
<hla locus="DRB3">
<amplification>
<sbt method="SMS" segment="Exon2" segment-number="2" allele-number="1"
continuity="false">CACGTTTCTTGGAGCTGCTTAAGTCTGAGTGTCAATTTCTCAATGGGACGGAGCGGGTTCGGTTCCTGGAG
AGACACTTCCATAACCAGGAGGAGTACGCGCTTCGACAGCGACGTGGGGGAGTACCGGGCGGTGAGGGAGCTGGGGCGGC
CTGATGCCGAGTACTGGAACAGCCAGAAGGACCTCCTGGAGCAGAAGCGGGGCCAGGTGGACAATTACTGCAGACACAACACTAC
GGGGTTGGTGAGAGCTTCACAGTGCAGCGGCGAG</sbt>
<sbt method="SMS" segment="Exon3" segment-number="3" allele-number="1"
continuity="false">TCCATCCTCAGGTGACTGTGTATCCTGCAAAGACCCAGCCCCTGCAGCACCACAACCTCCTGGTCTGCTCTG
TGAGTGGTTTCTATCCAGGCAGCATTGAAGTCAGGTGGTTCGGGAACGGCCAGGAAGAGAAGGCTGGGGTGGTGTCCACGGGC
CTGATCCAGAATGGAGACTGGACCTTCAGACCCTGGTGATGCTAGAAACAGTTCCTCGGAGTGGAGAGTTTACACCTGCCAA
GTGGAGACCCAAGCGTAACGAGCCCTCTCACAGTGGAAATGGA</sbt>
<sbt method="SMS" segment="Exon4" segment-number="4" allele-number="1"
continuity="false">GTGCACGGTCTGAATCTGCACAGAGCAAGATGCTGAGTGGAGTCGGGGGCTTTGTGCTGGGCCTGCTCTT
CCTTGGGGCCGGGCTGTTACTACTTCAGGAATCAGAAAG</sbt>
<sbt method="SMS" segment="Exon5" segment-number="5" allele-number="1"
continuity="false">GACACTCTGGACTTCAGCCAACAG</sbt>
<sbt method="SMS" segment="Exon6" segment-number="6" allele-number="1"
continuity="false">GATTCCTGAGCTGA</sbt>
</amplification>
</hla>
<hla locus="DQB1">
<amplification>
<sbt method="SMS" segment="Intron17" segment-number="17" allele-number="1"
continuity="false">ATGTCTTGGAAGAAGTCTTTGCGGATCCCCGGAGACCTTCGGGTAGCAACTGTCACCTTGATGCTGGCGAT
CCTGAGCTCCTACTGGCTGAGGGCAGAGACTCTCCCGGTCCGGGTACAGGGCGGCGGCTGGGGGCGCAG.....
.....GTCCCCCTGAGATCAAAGTCTACAGTGGCTGTCACGCAA</sbt>
<sbt method="SMS" segment="Intron17" segment-number="17" allele-number="2"
continuity="false">ATGTCTTGGAAGAAGGCTTTGCGGATCCCCGGAGACCTTCGGGTAGCAACTGTCACCTTGATGCTGGCGA
TGCTGAGCTCCCTACTGGCTGAGGGCAGAGACTCTCCCGAGGCCGGGTACAGGGCGGCGGCTGCGGGGGCGGCCGGGCTGGGG
CCTGACTGACCGGCCGGTGATTCCCGCAGAGGATTCGTGTACCAGTTAAGGGCATGTGCTAC.....
.....GTGCCTGCCAGAATCCAGCTGCCTGTGTACGCTTGTCCCCCTGAGATCAAAGTCTACAGTGGCTGTCACGCAG</sbt>
</amplification>
</hla>
<hla locus="DPB1">
<amplification>
<sbt method="SMS" segment="Intron17" segment-number="17" allele-number="1"
continuity="false">ATGATGGTTCTGCAGTTTCTGCGGCCCGGACAGTGGCTCTGACGGCGTTACTGATGGTGTGCTGCTCAC
ATCTGTGGTCCAGGGCAGGGCCACTCCAGGTCCGCCCCCTCCCGCAGAGAATTACCTTTTCCAGGG.....
.....TGTATTCAGTGAAGTCTGCCCCAAATCAAGTTTAGTGCCCTCATCCATTTATGTCTCAGACCACTATTCTTAACATTCAAT</sbt>
```

```
<sbt method="SMS" segment="Intron17" segment-number="17" allele-number="2"
continuity="false">ATGATGGTTCTGCAGTTTCTGCGGCCCGGACAGTGGCTCTGACGGCGTACTGATGGTGCTGCTCAC
ATCTGTGGTCCAGGGCAGGGCCACTCCAGGTCCGCCCCCTCCCGCAGAGAATTACCTTTCCAGGGACGG.....
.....CCATTTATGTCTCAGACCACTATTCTTAACTATTCAAT</sbt>
</amplification>
</hla>
<hla locus="DQA1">
<amplification>
<sbt method="SMS" segment="Intron17" segment-number="17" allele-number="1"
continuity="false">ATGATCCTAAACAAAGCTCTGCTGCTGGGGGCCCTCGCTCTGACCACCATGATGAGCCCTTGTTGGAGGTGA
AGGCATTGTGGTCTTTCTTCCCCTGTTCTCCGCCTTCTGCTTGTGCATCTTCACTCATCAGCTGACCA.....
.....TGAGACTGGTTACAGTTGAAGCGGCAGTATGAAAGGAAGGAAAGTGGGAGGGCGTTGTGGACATGAATGTGGTTGAAA</sbt>
<sbt method="SMS" segment="Intron17" segment-number="17" allele-number="2"
continuity="false">ATGATCCTAAACAAAGCTCTGCTGCTGGGGGCCCTCGCTCTGACCACCGTATGAGCCCTGTGGAGGTG
AAGACATTGTGGTCTTTCTTCCCCTGTTCTCCGCCTTCTGCTTGTGCATCTTCACTCATCAGCT.....
.....GAGACTGGTTACAGTTGAAGCGGCAGTATGAAAGGAAGGAAAGTGGGAGGGCGTTGTGGACATGAATGTGGTTTAAA</sbt>
</amplification>
</hla>
<hla locus="DPA1">
<amplification>
<sbt method="SMS" segment="Intron17" segment-number="17" allele-number="1"
continuity="false">ATGCGCCCTGAAGACAGAATGTTCCATATCAGAGCTGTGATCTTGAGAGCCCTCTCCTTGGCTTTCTGCTG
AGTCTCCGAGGAGCTGGGGCCATCAAGGCTTCTCCTTTTATATTATAAGTCTTATTATTCTCTAGCTT.....
.....GAAATACTGTAAAGGTGGGAATGTAAAGAGGAGGCCCTAGGATTT</sbt>
<sbt method="SMS" segment="Intron17" segment-number="17" allele-number="2"
continuity="false">ATGCGCCCTGAAGACAGAATGTTCCATATCAGAGCTGTGATCTTGAGAGCCCTCTCCTTGGCTTTCTGCTG
AGTCTCCGAGGAGCTGGGGCCATCAAGGTTTCTCCTTTTATATTATAAGTCTTATTATTCTCTAGCTT.....
.....GCCAGGGGCCCTGTGAAATACTGTAAAGGTGGGAATGTAAAAAAGGAGGTCCTAGAATTT</sbt>
</amplification>
</hla>
</typing>
</sample>
</project>
</hgx>
```