

**TABLE S4****Comparison of sequence coverage<sup>a</sup> and number of mutants needed to perform our cloning strategy in*****fp6***

Flow cell lanes used <sup>b</sup>	Reads	Mutants compared	<i>fp6</i> linked region	Number of candidates <sup>c</sup>	true <i>fp6</i> allele identified
2	paired-end	<i>fp6, fp9, fp12</i>	5811728-10105957Mb	6	Yes
2	single-end	<i>fp6, fp9, fp12</i>	5811728-11638999Mb	6	Yes
1	paired-end	<i>fp6, fp9, fp12</i>	5811728-10105957Mb	6	Yes
1	single-end	<i>fp6, fp9, fp12</i>	3615997-10105957Mb	6	Yes
2	paired-end	<i>fp6, fp9</i>	5811728-10105957Mb	6	Yes
2	single-end	<i>fp6, fp9</i>	3468244-11638999Mb	6	Yes
1	paired-end	<i>fp6, fp9</i>	3615997-11638999Mb	6	Yes
1	single-end	<i>fp6, fp9</i>	2405323-10501170Mb	6	Yes
2	paired-end	<i>fp6, fp12</i>	5811728-10105957Mb	6	Yes
2	single-end	<i>fp6, fp12</i>	5811728-11638999Mb	6	Yes
1	paired-end	<i>fp6, fp12</i>	5811728-10105957Mb	6	Yes
1	single-end	<i>fp6, fp12</i>	3615997-10105957Mb	6	Yes

<sup>a</sup>Sequence coverage for each WGS scenario (number of lanes and reads used) is shown in Table S2. <sup>b</sup>Per mutant. The Illumina Genome Analyzer II flow cell contains 8 lanes in total. <sup>c</sup>In all cases, 5 missense mutations and 1 5'UTR mutation were identified in *fp6* (Table S3). We also identified obvious high-density variant regions for *fp9* (ChrX:7.74Mb-14.85Mb) and *fp12* (ChrX:4.60Mb-5.88Mb).