

Mo17	GGCGCGGCGCGAGCCACCGGAGGCTACTGCTGCTACACCAGCCGGACACCAACCTCGCCGCGCTGCCTCCACCTGC
IBM003	GGCGCGGCGCGAGCCACCGGAGGCTACTGCTGCTACACCAGCCGGACACCAACCTCGCCGCGCTGCCTCCACCTGC
IBM097	GGCGCGGCGCGAGCCACCGGAGGCTACTGCTGCTACACCAGCCGGACACCAACCTCGCCGCGCTGCCTCCACCTGC
IBM182	GGCGCGGCGCGAGCCACCGGAGGCTACTGCTGCTACACCAGCCGGACACCAACCTCGCCGCGCTGCCTCCACCTGC
IBM270	GGCGCGGCGCGAGCCACCGGAGGCTACTGCTGCTACACCAGCCGGACACCAACCTCGCCGCGCTGCCTCCACCTGC
IBM304	GGCGCGGCGCGAGCCACCGGAGGCTACTGCTGCTACACCAGCCGGACACCAACCTCGCCGCGCTGCCTCCACCTGC
B73	GGCGCGGACGAGCCACCGGAGGCTACTGCTGCTACACCAGCAGGACACCAACCTCGCCGCGCTGCCTCCGCCTGC
IBM009	GGCGCGGACGAGCCACCGGAGGCTACTGCTGCTACACCAGCAGGACACCAACCTCGCCGCGCTGCCTCCGCCTGC
IBM062	GGCGCGGACGAGCCACCGGAGGCTACTGCTGCTACACCAGCAGGACACCAACCTCGCCGCGCTGCCTCCGCCTGC
IBM144	GGCGCGGACGAGCCACCGGAGGCTACTGCTGCTACACCAGCAGGACACCAACCTCGCCGCGCTGCCTCCGCCTGC
IBM234	GGCGCGGACGAGCCACCGGAGGCTACTGCTGCTACACCAGCAGGACACCAACCTCGCCGCGCTGCCTCCGCCTGC
IBM327	GGCGCGGACGAGCCACCGGAGGCTACTGCTGCTACACCAGCAGGACACCAACCTCGCCGCGCTGCCTCCGCCTGC

**Figure S7** Sequence alignment of fragment 7 (F7) among parents and selected DH lines of the IBM Syn10 DH population. IBM003, IBM097, IBM182, IBM270, and IBM304 in green rectangular are high-REC lines, and IBM009, IBM062, IBM090, IBM144, IBM234, and IBM327 in blue rectangular are low-REC lines. The bases in red boxes represent the SNP locus in F7.