

**TABLE S5 Coherence of the order of proximal limits**

Distal	Proximal	$bb^2$	$bb^{M1}$	$bb^{M3}$	$bb^{M4}$	$bb^{M18}$
R1767	R2916	—	—	DP	—	—
	R2784	—	DP	DP	—	—
	R1355	—	—	—	—	—
	R0750	—	—	—	—	—
	S3266	—	DP	DP	—	—
	R0963	DP	DP	DP	—	—
	R0910	DP	DP	DP	—	—
	R2166	DP	DP	DP	—	—
	S3542	DP	DP	DP	—	—
	S3079	DP	DP	DP	—	—
	C	DP	DP	DP	—	—
R2916	R2784	—	DP	DP	DP	DP
	R1355	—	—	—	DP	DP
	R0750	—	—	—	DP	DP
	S3266	—	DP	DP	DP	DP
	R0963	DP	DP	DP	DP	DP
	R0910	DP	DP	DP	DP	DP
	R2166	DP	DP	DP	DP	—
	S3542	DP	DP	DP	DP	DP
	S3079	DP	DP	DP	DP	DP
	C	DP	DP	DP	DP	DP
	R2784	R1355	—	—	—	DP
R0750		—	—	—	DP	DP
S3266		—	DP	—	DP	DP

	R0963	DP	DP	DP	DP	DP
	R0910	DP	DP	DP	DP	DP
	R2166	DP	DP	DP	DP	DP
	S3542	DP	DP	DP	DP	DP
	S3079	DP	DP	DP	DP	DP
	C	DP	DP	DP	DP	DP
R1355	R0750	—	—	—	DP	DP
	S3266	—	—	—	DP	DP
	R0963	DP	—	—	DP	DP
	R0910	DP	—	—	DP	DP
	R2166	DP	—	—	DP	DP
	S3542	DP	—	—	DP	DP
	S3079	DP	—	—	DP	DP
	C	DP	—	—	DP	DP
R0750	S3266	—	—	—	—	—
	R0963	DP	—	—	DP	DP
	R0910	DP	—	—	DP	DP
	R2166	DP	—	—	DP	DP
	S3542	DP	—	—	DP	DP
	S3079	DP	—	—	DP	DP
	C	DP	—	—	DP	DP
S3266	R0963	DP	DP	DP	DP	DP
	R0910	DP	DP	DP	DP	DP
	R2166	DP	DP	DP	DP	DP
	S3542	DP	DP	DP	DP	DP
	S3079	DP	DP	DP	DP	DP

	C	DP	DP	DP	DP	DP
R0963	R0910	DP	DP	—	DP	DP
	R2166	DP	DP	DP	DP	DP
	S3542	DP	DP	DP	DP	DP
	S3079	DP	DP	DP	DP	DP
	C	DP	DP	DP	DP	DP
R0910	R2166	DP	—	DP	—	DP
	S3542	DP	—	DP	—	DP
	S3079	DP	—	DP	—	DP
	C	DP	—	DP	—	DP
R2166	S3542	—	—	DP	—	—
	S3079	DP	—	DP	—	—
	C	DP	—	DP	—	—
S3542	S3079	DP	—	—	—	—
	C	DP	—	—	—	—
S3079	C	DP	—	—	—	—

The pairwise orders of the proximal limits of all of the markers, listed in the first and the second columns, are compared for the maps of  $bb^2$  (third column) and the magnified alleles (fourth through seventh columns).

D = distal, P = proximal

— = order can not be determined

C = R2059, S3887, S3518, S3030, S2876 and S2785; grouped together because they all have the centromere as their proximal limit in all of the arrays.