

Additional Table 1. HG.CAST 2D subcongenic strains developed and their corresponding microsatellite and SNP markers, and PCR conditions.

Strain	Microsatellite	[MgCl ₂] mM	Location		Source
			Mb	cM	
HG2D-1	D2Mit185	2.0	105.335860	47.5	MIT
HG2D-1	D2Mit58	2.0	108.099851	51.4	MIT
HG2D-1	D2Mit101	2.0	114.905325	52.5	MIT
HG2D-2	D2Mit420	2.0	118.203953	54.6	MIT
HG2D-2	D2Mit107	2.0	133.061498	61.2	MIT
HG2D-2	D2Mit490	2.0	138.721284	64.5	MIT
HG2D-3	D2Mit194	2.0	143.757317	81.4	MIT
HG2D-3	rs27273819		145.506914		Perlegen2
HG2D-3	rs27325361		147.258580		Perlegen2
HG2D-3	D2Mit260	1.5	149.008060	83	MIT
HG2D-3	rs27372237		150.007335		Perlegen2
HG2D-3	rs27350314		150.998686		Perlegen2
HG2D-3, and -4	rs27385876		151.669008		Perlegen2
HG2D-3, and -4	rs27343750		152.330044		Perlegen2
HG2D-3, and -4	rs27352724		152.991660		Perlegen2
HG2D-3, and -4	rs27343642		153.649790		Perlegen2
HG2D-3, and -4	D2Mit286	2.0	154.338414	87.0	MIT
HG2D-3, and -4	rs27365903		154.312195		Perlegen2
HG2D-3, and -4	rs27326115		154.978855		Perlegen2
HG2D-3, and -4	D2Mit262	2.0	155.693206	87.0	MIT
HG2D-3, and -4	rs27323847		155.643661		Perlegen2
HG2D-3, and -4	rs27321848		156.305388		Perlegen2
HG2D-3, and -4	rs27307998		156.976171		Perlegen2
HG2D-3, and -4	rs27358422		157.638649		Perlegen2
HG2D-3, and -4	rs27319627		158.299081		Perlegen2
HG2D-3, and -4	rs27306308		158.858393		Perlegen2
HG2D-3, and -4	rs27335891		159.621255		Perlegen2
HG2D-4	D2Mit196	2.0	160.286752	92.0	MIT
HG2D-4	rs28279021		161.056198		Perlegen2
HG2D-4	rs27317780		161.808146		Perlegen2
HG2D-4	rs28280230		162.568440		Perlegen2
HG2D-4	rs16787600		163.332178		Perlegen2
HG2D-4	rs27300434		163.923855		Perlegen2
HG2D-4	rs28240341		164.844700		Perlegen2
HG2D-4	rs27330151		165.615450		Perlegen2
HG2D-4	rs27298803		166.381247		Perlegen2
HG2D-4	rs27290252		167.106665		Perlegen2
HG2D-4	rs27322351		167.891803		Perlegen2
HG2D-4	rs27288813		168.459905		Perlegen2
HG2D-4, and -5	D2Mit456	1.5	168.761938	86.3	MIT
HG2D-4, and -5	rs27340088		169.001154		Perlegen2
HG2D-4, and -5	rs27622165		169.568797		Perlegen2
HG2D-4, and -5	rs6233743		170.120252		Perlegen2

<i>Strain</i>	<i>Microsatellite</i>	<i>[MgCl₂] mM</i>	<i>Location</i>		<i>Source</i>
			<i>Mb</i>	<i>cM</i>	
<i>HG2D-4, and -5</i>	<i>rs27618585</i>		170.675178		Perlegen2
<i>HG2D-4, and -5</i>	<i>rs28289712</i>		171.240389		Perlegen2
<i>HG2D-4, and -5</i>	<i>rs27289118</i>		171.786730		Perlegen2
<i>HG2D-4, and -5</i>	<i>rs27631793</i>		172.345636		Perlegen2
<i>HG2D-4, and -5</i>	<i>rs27646938</i>		172.888191		Perlegen2
<i>HG2D-4, and -5</i>	<i>rs27644321</i>		173.450373		Perlegen2
<i>HG2D-4, and -5</i>	<i>rs27669516</i>		174.011386		Perlegen2
<i>HG2D-4, and -5</i>	<i>D2Mit213</i>	1.5	174.372768	105.0	MIT
<i>HG2D-4, and -5</i>	<i>rs27623944</i>		174.559892		Perlegen2
<i>HG2D-4, and -5</i>	<i>rs27634370</i>		175.001750		Perlegen2
<i>HG2D-4, and -5</i>	<i>UCDSNP2</i>		176.595657		UC Davis
<i>HG2D-4, and -5</i>	<i>rs27650182</i>		176.860174		Perlegen2
<i>HG2D-4, and -5</i>	<i>rs27650079</i>		177.339866		Perlegen2
<i>HG2D-4, and -5</i>	<i>rs27652370</i>		177.890297		Perlegen2
<i>HG2D-4, and -5</i>	<i>rs27703094</i>		178.449714		Perlegen2
<i>HG2D-5</i>	<i>D2Mit148</i>	1.5	178.535307	105.0	MIT
<i>Outside congenic</i>	<i>rs27683474</i>		179.000149		Perlegen2
<i>Outside congenic</i>	<i>rs27648414</i>		179.546670		Broad1
<i>Outside congenic</i>	<i>rs27681748</i>		180.104819		Perlegen2