

Supplementary Table S1. Generalized multifactor dimensionality reduction (GMDR) results of multi-locus interaction with genes related to adult height

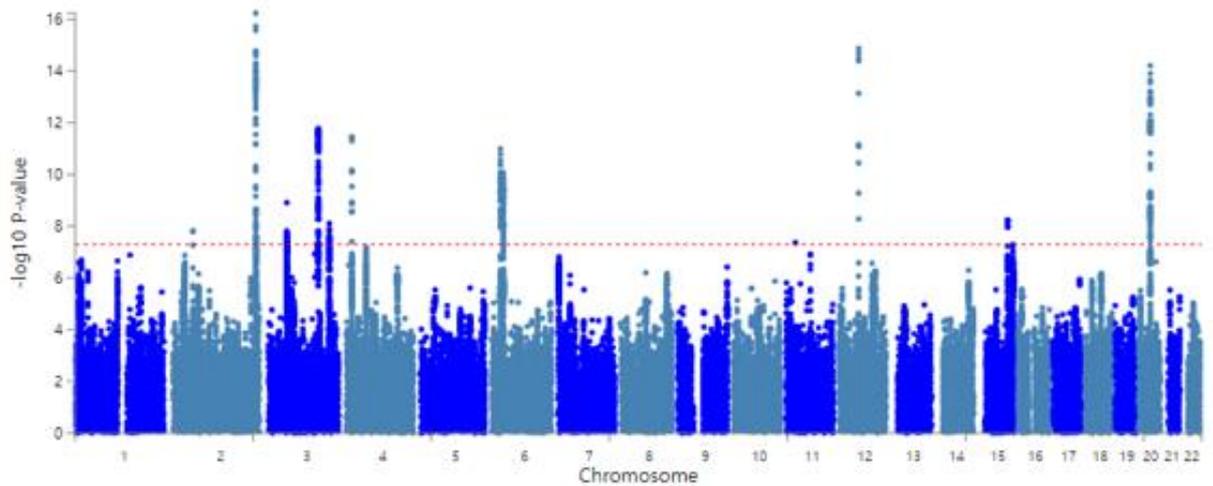
Model 1	Model 1				Model 2			
	TRBA	TEBA	P value	CVC	TRBA	TEBA	P value	CVC
<i>CPZ_rs3756173</i>	0.5220	0.5211	0.001	8	0.524	0.5211	0.0107	8
<i>ZBTB38_rs6762722</i>	0.5333	0.5334	0.001	9	0.5335	0.5336	0.001	9
<i>PAIP2B_rs13034890</i>	0.5374	0.5322	0.001	9	0.5374	0.532	0.001	9
<i>CPZ_rs3756173</i> model 2	0.5374	0.5322	0.001	9	0.5374	0.532	0.001	9
<i>LTBP1_rs4630744</i> plus model 3	0.5453	0.5461	0.001	10	0.5453	0.54	0.001	10
<i>LCORL_rs7700107</i> , <i>ADAMTSL3_rs1600640</i> ,	0.5540	0.5347	0.001	6	0.554	0.5348	0.001	6
<i>LTBP1_rs4630744</i> , plus model 2	0.5733	0.5244	0.001	8	0.5733	0.5241	0.001	8
<i>GDF5_rs224331</i> , <i>LCORL_rs7700107</i> ,	0.5733	0.5244	0.001	8	0.5733	0.5241	0.001	8
<i>DIS3L2_rs1249260</i> ,	0.5733	0.5244	0.001	8	0.5733	0.5241	0.001	8
<i>LTBP1_rs4630744</i> plus model 2	0.6096	0.5215	0.001	10	0.6096	0.52	0.001	10
<i>NCAPG_rs2074974</i> plus model 6	0.6096	0.5215	0.001	10	0.6096	0.52	0.001	10
<i>ADAMTSL3_rs1600640</i> plus model 7	0.6552	0.5145	0.001	10	0.6554	0.5149	0.001	10
<i>CPZ_rs3756173</i> plus model 8	0.7002	0.5114	10	10	0.7005	0.5111	10	10
<i>IGF1R_rs2871865</i> plus model 9	0.7340	0.5126	0.0107	10	0.7342	0.5122	0.0107	10

TRBA, training balanced accuracy; TEBA, testing balanced accuracy; CVC, cross-validated consistency; P-value for assessing the best model.

Covariates for model 1: sex, area, age, weight, weight at age 18, education, and income.
Covariates for model 2: covariates for model 1 plus smoking, energy intake, alcohol intake, physical exercise, and.

Figure S1. Distribution of genetic variants for tall stature by a genome-wide association study.

A. Manhattan plot of the p -value of genetic variants for tall stature.



B. Q-Q plot of observed and expected p -values for tall stature.

The short stature (SS; $n=51,165$; control) and tall stature (TS; $n=7,536$; case) groups of the participants were divided by the cutoff of ≥ 175 cm for men and ≥ 163 cm for women, which were the 15th percentiles of adult height in people aged >40 years in 2010-2014 in Korea. The covariates for GWAS were age, gender, weight, residence area, education, income, energy intake, exercise, alcohol drinking, smoking, and osteoporosis incidence.

