

**Additional file 2. Association within or nearby linkage region<sup>a</sup> ( $P < 10^{-6}$  &  $LOD \leq 1.9$ )**

	Ethnic Group	EA: European Americans		AA: African Americans	MA: Mexican Americans		JA: Japanese Americans
<b>PUBLISHED LINKAGE RESULTS</b>	1-LOD chromosomal region (Trait & LOD of linkage analysis)	2q12.1-2q13 (Weight, LOD=2.91)		16p13.2-12.1 (BPfactor, LOD=2.25)	3p26 (Insulin-Glucose, Blood Pressure factors, LOD=2.20)(1) (Serum uric acid, LOD=4.9)(2)		5q33.1-5q34 (log-Waist, LOD=1.98)
<b>ASSOCIATION RESULTS</b>	trait	Weight	Weight	log(TG)	log(HDL)	log(HDL)	Fasting Glucose
	<b>Chromosomal Region</b>	2q14.2		16p13.13	3p26.3-p26.2		5q23.3-5q31.1 <sup>b</sup>
	<b>Chr</b>	2	2	16	3	3	5
	<b>Bp</b>	121836875	121843978	11562798	2004251	2001175	130581195
	<b>rsid</b>	rs139940998 <sup>c</sup>	rs144756634 <sup>c</sup>	rs551107164	rs17005939	rs12631510	rs6875363
	<b>Gene</b>	GLI2-TFCP2L1		AK126539	CNTN6-CNTN4		LYRM7-CDC42SE2
	<b>Function</b>	intergenic	intergenic	ncRNA_intronic	intergenic	intergenic	intergenic
	<b>A1</b>	A	A	G	C	C	T
	<b>A2</b>	G	T	A	T	T	C
	<b>Freq<sup>§</sup></b>	0.0087	0.0089	0.011	0.4186	0.4375	0.6857
	<b>Freq GENNID<sup>  </sup></b>	0.01	0.01	0.01	0.35	0.35	0.4421
	<b><math>\beta</math></b>	1.84	1.84	1.41	-0.08	-0.08	-0.54263
	<b>SE</b>	0.32	0.32	0.26	0.02	0.02	0.109372
	<b>P</b>	7.34E-09	7.34E-09	7.61E-08	8.02E-08	9.13E-08	1.38E-07
<b>I<sup>2</sup> (% heterogeneity)</b>	-	-	-	80.7%	79.2%	0% <sup>h</sup>	

<sup>a</sup>Candidate linkage regions for EA, AA and JA were from publication analyses (3-7)

<sup>b</sup>Region with evidence of association is very close to previously nominated 1-LOD interval but not within it

<sup>c</sup>Bolded variants were significantly associated with weight ( $P < 5 \times 10^{-8}$ ).

<sup>f</sup>Frequency of A1 allele in gnomAD (8) : NFE (Non-Finnish Europeans) for EA, EAS (East Asians) for JA, AMR (Latinos) for MA, and AFR (African/African Americans) for AA

<sup>§</sup> Frequency of A1 allele in GENNID as estimated by GCTA (9)

<sup>h</sup>  $I^2 = -51.6\%$  and was set to 0% based on Higgins et al (10)

## REFERENCES FOR ADDITIONAL FILE

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