



# Uncovering Rare Obesity Gene Panel

The Uncovering Rare Obesity test panel includes 87 genes (including 29 BBS-associated genes) and 1 chromosomal region, reflective of nearly all of the most frequently tested genes associated with obesity.

Gene Symbol or Region (alternate*)	OMIM Gene Number	Gene Symbol or Region (alternate*)	OMIM Gene Number	Bardet-Biedl syndrome associated genes:	
				Gene Symbol or Region (alternate*)	OMIM Gene Number
ADCY3	600291	PCSK1	162150	ARL6 (BBS3)	608845
AFF4	604417	PHF6	300414	BBIP1 (BBS18)	613605
ALMS1	606844	PHIP	612870	BBS10	610148
ASIP	600201	PLXNA1	601055	BBS12	610683
BDNF	113505	PLXNA2	601054	BBS1	209901
CPE	114855	PLXNA3	300022	BBS2	606151
CREBBP	600140	PLXNA4	604280	BBS4	600374
CUL4B	300304	POMC	176830	BBS5	603650
DNMT3A	602769	PPARG	601487	BBS7	607590
DYRK1B	604556	PROK2	607002	BBS9 (PTHB1)	607968
EP300	602700	RAB23	606144	IFT172 (BBS20)	607386
GNAS	139320	RAI1	607642	IFT27 (BBS19)	615870
HTR2C	312861	RPGRIP1L	610937	IFT74 (BBS22)	608040
INPP5E	613037	RPS6KA3	300075	LRRRC45	
ISL1	600366	SEMA3A	603961	LZTFL1 (BBS17)	606568
KIDINS220	615759	SEMA3B	601281	MKKS (BBS6)	604896
KSR2	610737	SEMA3C	602645	MKS1 (BBS13)	609883
LEP	164160	SEMA3D	609907	NPHP1	607100
LEPR	601007	SEMA3E	608166	SCAPER	611611
MAGEL2	605283	SEMA3F	601124	SCLT1	611399
MC3R	155540	SEMA3G	620997	SDCCAG8 (BBS16)	613524
MC4R	155541	SH2B1	608937	TMEM67	609884
MECP2	300005	SIM1	603128	TRIM32 (BBS11)	602290
MRAP2	615410	TBX3	601621	TTC21B	612014
NCOA1 (SRC1)	602691	TRPC5	300334	TTC8 (BBS8)	608132
NR0B2	604630	TUB	601197	WDPCP (BBS15)	613580
NRP1	602069	UCP3	602044		
NRP2	602070	VPS13B	607817		
NTRK2	600456	16p11.2 chromosomal region <sup>†</sup>	613444 <sup>‡</sup>		
PCNT	605925				

\*Alternate gene symbols or phenotype abbreviations listed for clarity

<sup>†</sup>Assessment for rearrangement of the 16p11.2 chromosomal region

<sup>‡</sup>OMIM phenotype number

Gene symbols and alternative names may change and are current as of July 2025.

## Questions? Contact PreventionGenetics

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