

White Bars = Control Mice Black Bars = High-Fat Mice Gray Bars = F/WR Mice

Genes up- or down-regulated by the high-fat diet and normalized to control levels by fasting/ weight reduction.

Gene	GenBank	Control	High-Fat	F/WR	Biological
Name	#	Mice	Mice	Mice	Role
Crym	$NM_{-} 016669$	100%	69%	120%	μ -Crystallin
Cyp2c37	${ m NM_{-}}\ 010001$	100%	30%	95%	Cytochrome P450
Eva	BC015076	100%	162%	119%	Epithelial
					V-like Antigen
Kcnk8	$NM_{-} 010609$	100%	38%	77%	Potassium Channel
Ndph	$\rm NM_{-}~010883$	100%	164%	81%	Neuron Function
Pmm1	AK004631	100%	46%	87%	Protein Secretion
Serpina5	$\rm NM_{-}~008785$	100%	171%	107%	Serine Protease
					Inhibitor
Sh3kbp1	AK004636	100%	241%	107%	Signaling
1110034G24Rik	AK004090	100%	45%	80%	Unknown
1700019L13Rik	AK006130	100%	55%	114%	Unknown
4930442L21Rik	${ m NM_{-}}~026253$	100%	220%	116%	Unknown
4930579D07Rik	AK016314	100%	42%	72%	Unknown
4932422M17Rik	AK016534	100%	72%	140%	Unknown
continued on next page					



2810055C24Rik

AK012951

100%

64%

127%

Protein

Degradation

continued on next page



 $Group \ D$

White Bars = Control MiceBlack Bars = High-Fat MiceGray Bars = F/WR Mice

Genes up- or down-regulated by the high-fat diet and fasting/ weight reduction.

Gene	GenBank	Control	High-Fat	F/WR	Biological
Name	#	Mice	Mice	Mice	Role
Bmp2	$\rm NM_{-}~007553$	100%	153%	210%	Development
Copz2	$\rm NM_{-}~019877$	100%	266%	521%	Vesicle Trafficking
Fosb	$NM_{-} 008036$	100%	231%	297%	Signalling
Gabrr1	$\rm NM_{-}~008075$	100%	245%	361%	Receptor
Has3	NM_ 008217	100%	37%	49%	Hyaluronan
					Synthesis
IL6st	$\rm NM_{-}~010560$	100%	154%	144%	Signalling
Rab3c	$NM_{-} 023852$	100%	160%	260%	Exocytosis
Ttr	$\rm NM_{-}~013697$	100%	63%	44%	Hormone Transport
1110007C24Rik	AK014449	100%	255%	459%	Unknown
2700062B08Rik	NM_ 029838	100%	266%	405%	Putative Collagen-
					like (CLAC)
3110004A18Rik	AK013988	100%	258%	463%	Unknown
4833414G15Rik	AK019515	100%	162%	257%	Putative
					Phosphatase
4933432M07Rik	AK017027	100%	223%	191%	Protein Degradation
5730458M16Rik	AK017674	100%	200%	235%	Unknown
continued on next page					

Group E				White Ba Black Ba Gray Ba	rs = Control Mice rs = High-Fat Mice rs = F/WR Mice		
Genes up- or down-regulated by fasting/ weight reduction.							
Gene	GenBank	Control	High-Fat	F/WR	Biological		
Name	#	Mice	Mice	Mice	Role		
Ctrl	NM_ 023182	100%	121%	327%	Protein Metabolism		
Resp18	NM_ 009049	100%	88%	54%	Hormone Secretion		
Snrpg	NM ₋ 026506	100%	89%	199%	Translation		
2310034L21Rik	NM_ 025631	100%	123%	225%	Unknown		
Group F	White Bars = Control Mice Black Bars = High-Fat Mice Gray Bars = F/ WR Mice						
Genes up- or down-regulated by high-fat diet and fasting/ weight reduction.							
Gene	GenBank	Control	High-Fat	F/WR	Biological		
Name	#	Mice	Mice	Mice	Role		
1700095D18Rik	AK007076	100%	158%	293%	RNA-binding Region		