

# Mature adipocytes: clusters of enriched pathways for obese only

Pathway

cell surface receptor protein tyrosine phosphatase signaling pathway  
cellular response to glucocorticoid stimulus  
regulation of smooth muscle cell proliferation  
regulation of bicellular tight junction assembly  
regulation of osteoblast differentiation  
regulation of cardiac muscle contraction by regulation of the release of sequestered calcium ion  
sympathetic ganglion development  
negative regulation of anoikis  
negative regulation of epidermal growth factor receptor signaling pathway  
negative regulation of cardiac muscle hypertrophy in response to stress  
amyloid-beta clearance  
regulation of focal adhesion assembly  
actin filament depolymerization  
regulation of JNK cascade  
positive regulation of cyclin-dependent protein serine/threonine kinase activity  
positive regulation of nuclear-transcribed mRNA catabolic process, deadenylation-dependent decay  
substrate adhesion-dependent cell spreading  
receptor catabolic process  
focal adhesion assembly  
primary miRNA processing  
positive regulation of chondrocyte differentiation  
negative regulation of fat cell differentiation  
fat cell differentiation  
endocytosis  
stress fiber assembly  
response to cytokine  
regulation of small GTPase mediated signal transduction  
cellular response to insulin stimulus  
negative regulation of miRNA transcription  
positive regulation of miRNA transcription  
mRNA stabilization  
response to interleukin-1  
actin cytoskeleton organization  
canonical Wnt signaling pathway  
negative regulation of protein phosphorylation  
ephrin receptor signaling pathway  
peroxisome organization  
cellular response to hypoxia  
BMP signaling pathway  
symbiont entry into host cell  
positive regulation of GTPase activity  
positive regulation of blood vessel endothelial cell migration  
positive regulation of protein localization to plasma membrane  
regulation of cell shape  
circadian regulation of gene expression  
transforming growth factor beta receptor signaling pathway  
cell migration  
mRNA processing  
phosphatidylinositol 3-kinase/protein kinase B signal transduction  
protein phosphorylation  
microtubule cytoskeleton organization  
peptidyl-serine phosphorylation  
positive regulation of ERK1 and ERK2 cascade  
protein sumoylation  
negative regulation of gene expression

0

3

6

9

Fold enrichment