A
-log10 (P value)
log2FC
up−rgulated (1033)
down−regulated (1305)
B
Glyoxylate and dicarboxylate metabolism
Propanoate metabolism
2−Oxocarboxylic acid metabolism
Butanoate metabolism
Tryptophan metabolism
Fatty acid metabolism
Oxidative phosphorylation
Citrate cycle (TCA cycle)
Carbon metabolism
Ras signaling
ECM−receptor interaction
cAMP signaling
Wnt signaling
Melanogenesis
HIF−1 signaling
Rap1 signaling
PI3K−Akt signaling
Up-regulated in white skins
Down-regulated in white skins
-log10 (P value)
Count
Fold Enrichment
C
Down-regulated in white skins
Up-regulated in white skins
-log10 (P value)
GO terms
biological process
cellular component
molecular function
Hair follide development
Skin development
Calcium−mediated signaling
Keratinocyte proliferation
Epidermis development
Protein phosphorylation
Cell migration
Cytoskeleton
Keratin filament
Extracellular exosome
External side of plasma membrane
Plasma membrane part
Guanylate cyclase activity
Wnt−protein binding
Growth factor binding
Growth factor activity
Calcium ion binding
Electron carrier activity
Catalytic activity
Oxidoreductase activity
NAD binding
Fatty−acyl−CoA binding
NADP binding
Mitochondrial respiratory chain complexI
Peroxisomal membrane
Mitochondrial membrane
Cytosol
Fatty acid beta−oxidation
ATP biosynthetic process
Response to oxidative stress
Metabolic process
Coenzyme biosynthetic process
Glutathione metabolic process
Oxidative phosphorylation
Cellular lipid metabolic process
D
log2FC
ETS1 -1.40
TCF7L1 -1.07
CREB3L2 -1.29
SOX18 -1.63
(1) Transcription factor genes that regulate melanocyte development
ADCY2 -2.28
ADCY4 -2.00
ADCY5 -1.10
FZD2 -1.29
FZD4 -1.46
FZD10 -1.24
WNT10B -1.22
WNT11 -3.05
KIT -1.68
HGF -1.29
EDN1 -1.24
ECE1 -1.30
NOTCH2 -1.04
GAS1 -1.07
PDGFB -1.33
PREX1 -2.04
(2) Genes associated with melanocyte development, differentiation, or migration
LEF1 -1.64
TYRP1 -8.63
DCT -3.96
PMEL -7.32
MYRIP -2.67
LYST -1.34
GPNMB -2.01
SLC1A4 -2.04
SERPINF1 -1.24
TRPV2 -1.15
FAS -1.31
(3) Genes associated with pigmention
W2
W1
W3
B1
B2
B3