

1 **Supplementary materials Table S1** KEGG pathways separately for *PTK2B* a  
2 nd *PRKG2*.  
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*PTK2B*

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Calcium signaling pathway  
Chemokine signaling pathway  
GnRH signaling pathway  
Hepatitis B  
Human cytomegalovirus infection  
Human immunodeficiency virus 1 infection  
Leukocyte transendothelial migration  
Natural killer cell mediated cytotoxicity  
Phospholipase D signaling pathway  
Yersinia infection

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*PRKG2*

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cGMP-PKG signaling pathway  
Circadian entrainment  
Gap junction  
Long-term depression  
Olfactory transduction  
Platelet activation  
Regulation of lipolysis in adipocytes  
Renin secretion  
Salivary secretion  
Thermogenesis

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**Supplementary materials Table S2** Primers in this study.

Gene	Product	Forward primer (5'-3')	Reverse primer (5'-3')
<i>ACTB</i>	Actin beta	CGAGGACTTTGATTGCACATTG	AGAGAAGTGGGGTGGCTTTTAG
<i>ALPL</i>	Alkaline phosphatase, biomineralization associated	TTTCTCTTGGGCAGGCAG	GTTCCACGGAGGCTTCAG
<i>FABP4</i>	Fatty acid binding protein 4	GAGAGGATGATAAACTGGTGGT	GAATGTTGTAGAGTTCAATGCG
<i>PPARG</i>	Peroxisome proliferator activated receptor gamma	TGCAAGGGTTTCTTCCGG	ATCCCCACTGCAAGGCAT
<i>PRKG2</i>	Protein kinase cGMP-dependent 2	TGTGGCAAACCTGAACCG	GGTTCTGGAATGGGGATG
<i>PTK2B</i>	Protein tyrosine kinase 2 beta	TCAGGGGGAAGAAGCAGA	GGGGTTGGGGAGAGAAAG
<i>RUNX2</i>	RUNX family transcription factor 2	GGACCTGTGCTTCCTGCC	TACTTGGTATACGGCCTTTAGA