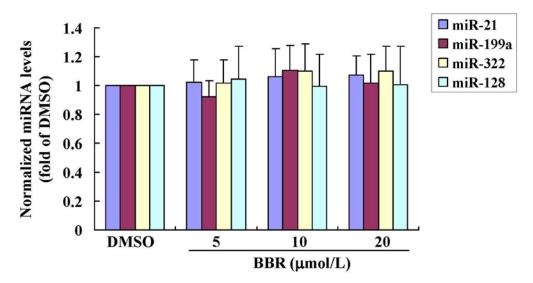
Supplementary Information

Berberine inhibits adipocyte differentiation, proliferation and adiposity through down-regulating galectin-3

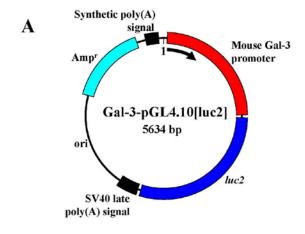
Can Wang¹, Yan Wang², Shu-Rong Ma², Zeng-Yan Zuo³, Yan-Bin Wu³, Wei-Jia Kong³, Ai-Ping Wang¹ & Jian-Dong Jiang²

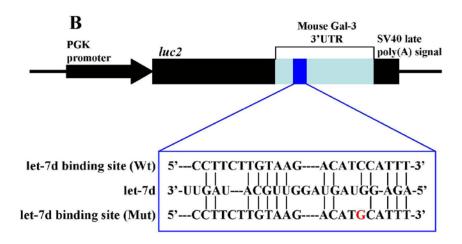
¹New Drug Safety Evaluation Center, Institute of Materia Medica, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China. ²State Key Laboratory of Bioactive Natural Products and Function, Institute of Materia Medica, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China. ³Department of Virology & NHC Key Laboratory of Biotechnology of Antibiotics, Institute of Medicinal Biotechnology, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China.

Correspondence and requests for materials should be addressed to W.J.K. (email: wjkong894@163.com), A.P.W. (email: wangaiping@imm.ac.cn), and J.D.J. (email: jiangjd@imm.ac.cn).



Supplementary Figure 1. Effects of BBR on the expression levels of miR-21, miR-199a, miR-322, and miR-128. Mouse primary preadipocytes were treated with DMSO or different concentrations of BBR for 72 h. After treatment, cells were harvested; the expression levels of indicated miRNAs were analyzed by real-time RT-PCR. The results were normalized to RNU6-2 and presented as fold of DMSO. Values are mean \pm SD of 4 separate experiments.



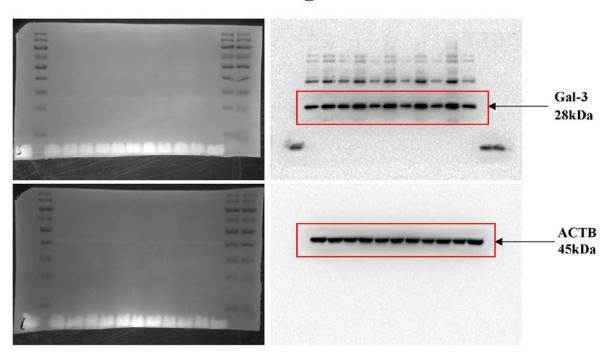


Supplementary Figure 2. Plasmid construction. (**A**) A recombinant plasmid containing the mouse Gal-3 promoter which is upstream of the *luc2* reporter gene. (**B**) Recombinant plasmids containing wild type (Wt) or a point mutation (Mut) of mouse Gal-3 3'UTR which is downstream of the *luc2* reporter gene.

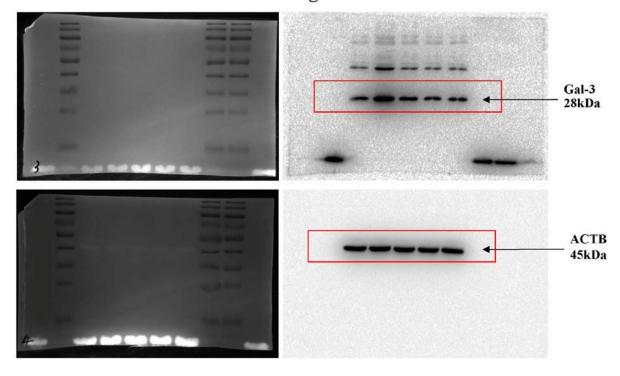
Supplementary Table 1 Mouse primers for quantitative real-time PCR (5'-3').

Gene	Forward primer	Reverse primer
Gal-3	CAGTGCTCCTGGAGGCTATC	ATTGAAGCGGGGGTTAAAGT
PPARγ	CGCTGATGCACTGCCTATGA	AGAGGTCCACAGAGCTGATTCC
$C/EBP\alpha$	CGCAAGAGCCGAGATAAAGC	CACGGCTCAGCTGTTCCA
aP2	CATGGCCAAGCCCAACAT	CGCCCAGTTTGAAGGAAATC
ACTB	GGCTGTATTCCCCTCCATCG	CCAGTTGGTAACAATGCCATGT

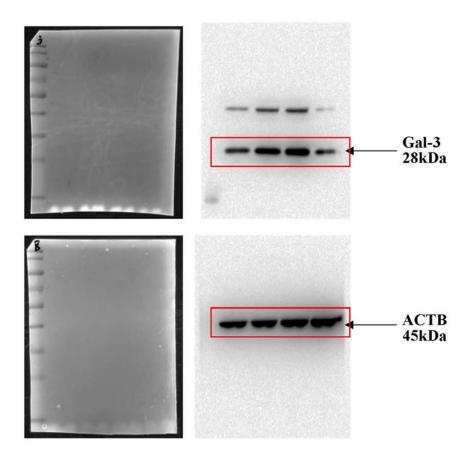
Full blot Fig. 2A



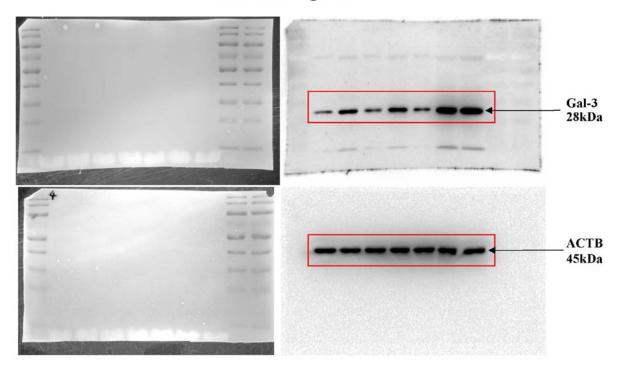
Full blot Fig. 2C



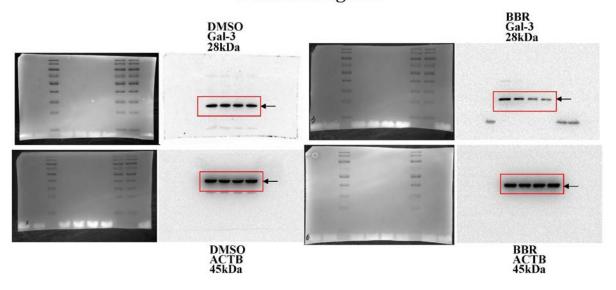
Full blot Fig. 3A



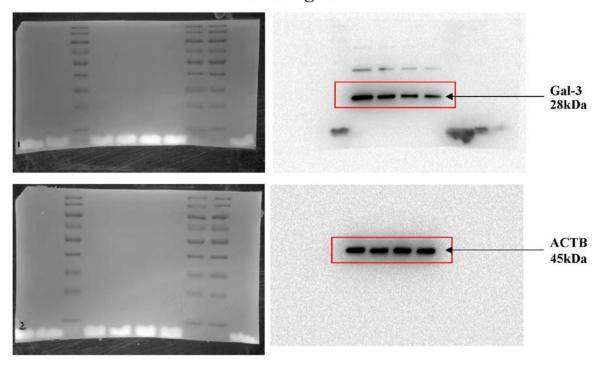
Full blot Fig. 4A



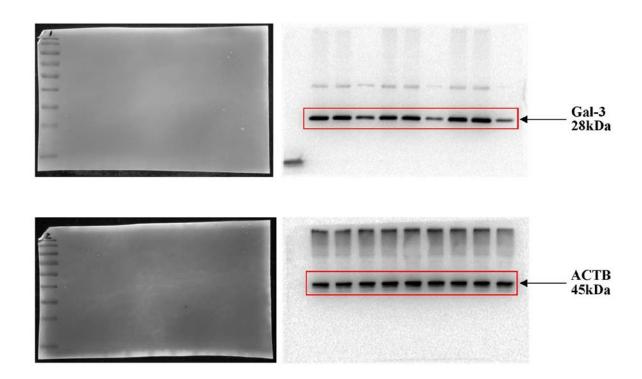
Full blot Fig. 6A



Full blot Fig. 6B



Full blot Fig. 7A



Full blot Fig. 8A

