Corrigendum

ATF6 modulates SREBP2-mediated lipogenesis

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The EMBO Journal (2008) 27, 2941. doi:10.1038/emboj.2008.225


Dr John Y-J Shyy, the corresponding author of the article ‘ATF6 modulates SREBP2-mediated lipogenesis, EMBO J 23: 950–958, 2004’ by Zeng et al has informed the Journal of the discovery of several inconsistencies between the published Figures 1A, 2 and 6B, and the original figures in the laboratory notebooks. Subsequent work carried out in both his and other laboratories has confirmed for all three figures the essential correctness of the experimental findings presented and their interpretation. However, he requests withdrawal of Figure 2 due to discrepancies in experimental conditions recorded in the laboratory notebook. New versions of Figure 1A (based on recent RT–PCR assays) and Figure 6B (adjusted exposure) are reproduced here.

Figure 1 Glucose deprivation suppresses SREBP2-mediated but activates ATF6-mediated transcription. (A) HepG2 and HEK293 cells cultured in high glucose (27.5 mM) DMEM with 10% FBS were subjected to no glucose DMEM with 10% dialysed FBS for 0, 3 and 6 h. Total RNA was extracted with RNeasy kit. RNA (2 μg) was reverse transcribed into cDNA and 20 ng cDNA (relative to RNA amount) was used in quantitative real-time PCR to detect Bip/grp78, GADD153, HMG-CoA reductase, HMG-CoA synthase and squalene synthase mRNA levels. 18s RNA was used as an internal control. The fold of induction was defined as the ratio of target gene mRNA level to that of 18s RNA, with time zero set as 1.0.

Figure 6 The leucine zipper domain of ATF6 binds to SREBP2. (B) HEK293 cells were transiently transfected with pCMV5-SREBP2(N), together with pCI-Flag-ATF6(2–366), pCI-Flag-ATF6(2–330) or pCI-Flag-ATF6(151–366). HA-SREBP2(N) was immunoprecipitated from the cell lysates by the use of anti-HA. The precipitates were separated by SDS–PAGE and the HA-SREBP2(N)-associated proteins recognized by immunoblotting with anti-Flag. In control experiments, the input was 10% of the cell lysates, and rabbit IgG was used as an immunoprecipitation control.