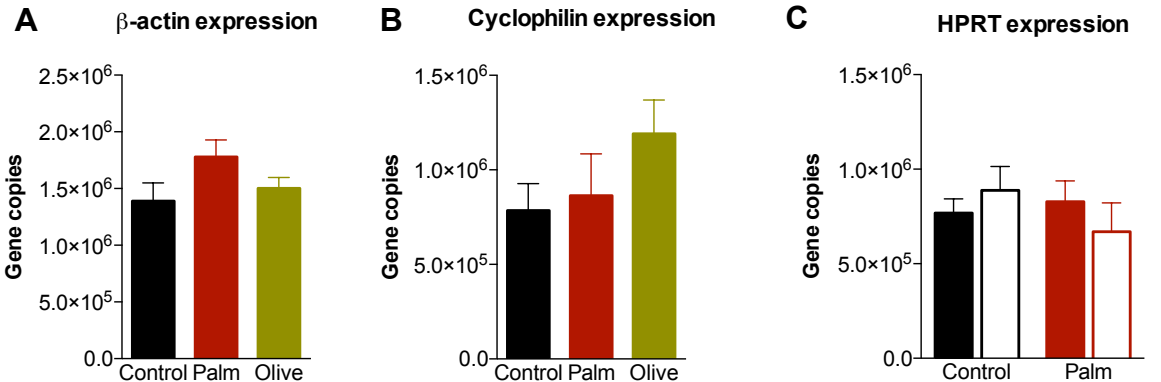

Figure S1. Housekeeping genes expression. (**A**, **B**) β-actin and cyclophilin mRNA levels for relative expression of pro-inflammatory markers in Figure 3A (n=5-8/group). (**C**) HPRT mRNA expression in nucleus accumbens for relative expression of pro-inflammatory markers in Figure 4I (n=7-10/group). Group mean ± SEM; two-way analysis of variance, Bonferroni post-hoc.

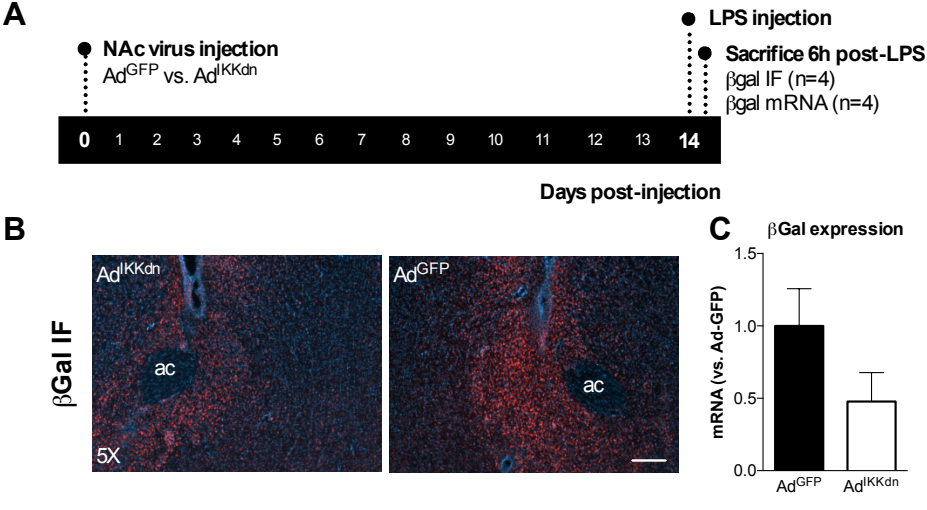

Figure S2. Placement and titer validation of nucleus accumbens IKK/NFκB inhibition. (A) Timeline depicting lipopolysaccharide (LPS) treatment and sacrifice following NAc virus injection. **(B)** βgal immunofluorescence (red) in nucleus accumbens of NFkB-LacZ reporter mice injected with Ad^{IKKdn} in the right hemisphere and Ad^{GFP} in the left hemisphere and treated with an intraperitoneal lipopolysaccharide (LPS) injection 6h prior to sacrifice. 5X magnification, 200μm scale bar. (**C**) Nucleus accumbens mRNA levels of βgal in NFkB-LacZ reporter mice injected with Ad^{GFP} and Ad^{IKKdn} (n=4/group).

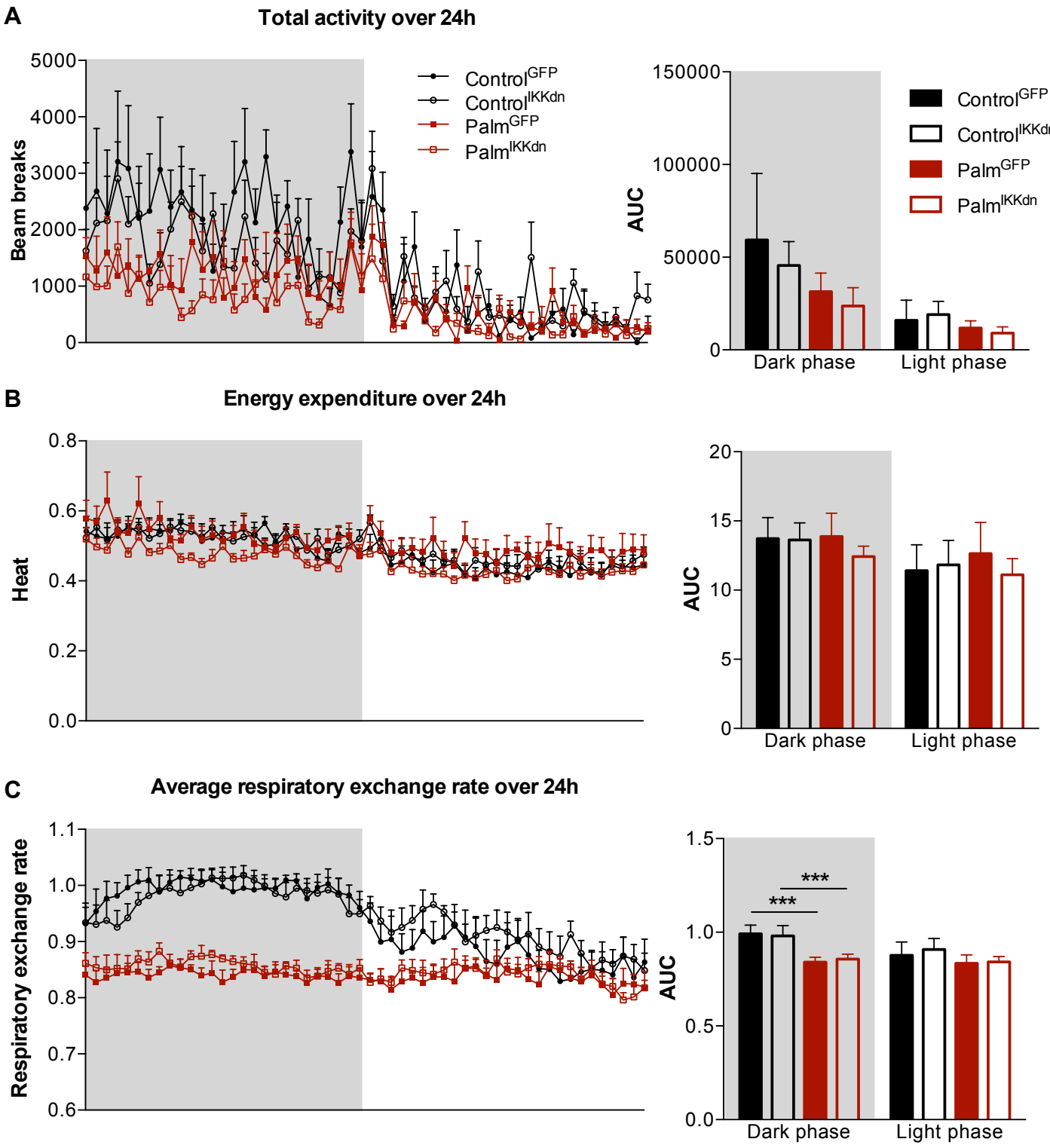

Figure S3. Viral inhibition of IKKβ/NFκB in nucleus accumbens does not affect metabolic funtions. (A) Locomotor activity, **(B)** energy expenditure and (**C**) respiratory exchange rate over 24h (n=5-7/group). Palm HFD significantly reduces mean respiratory exchange rate during dark phase in both viral conditions. Two-way analysis of variance; Bonferonni post hoc. ***p<0.001.

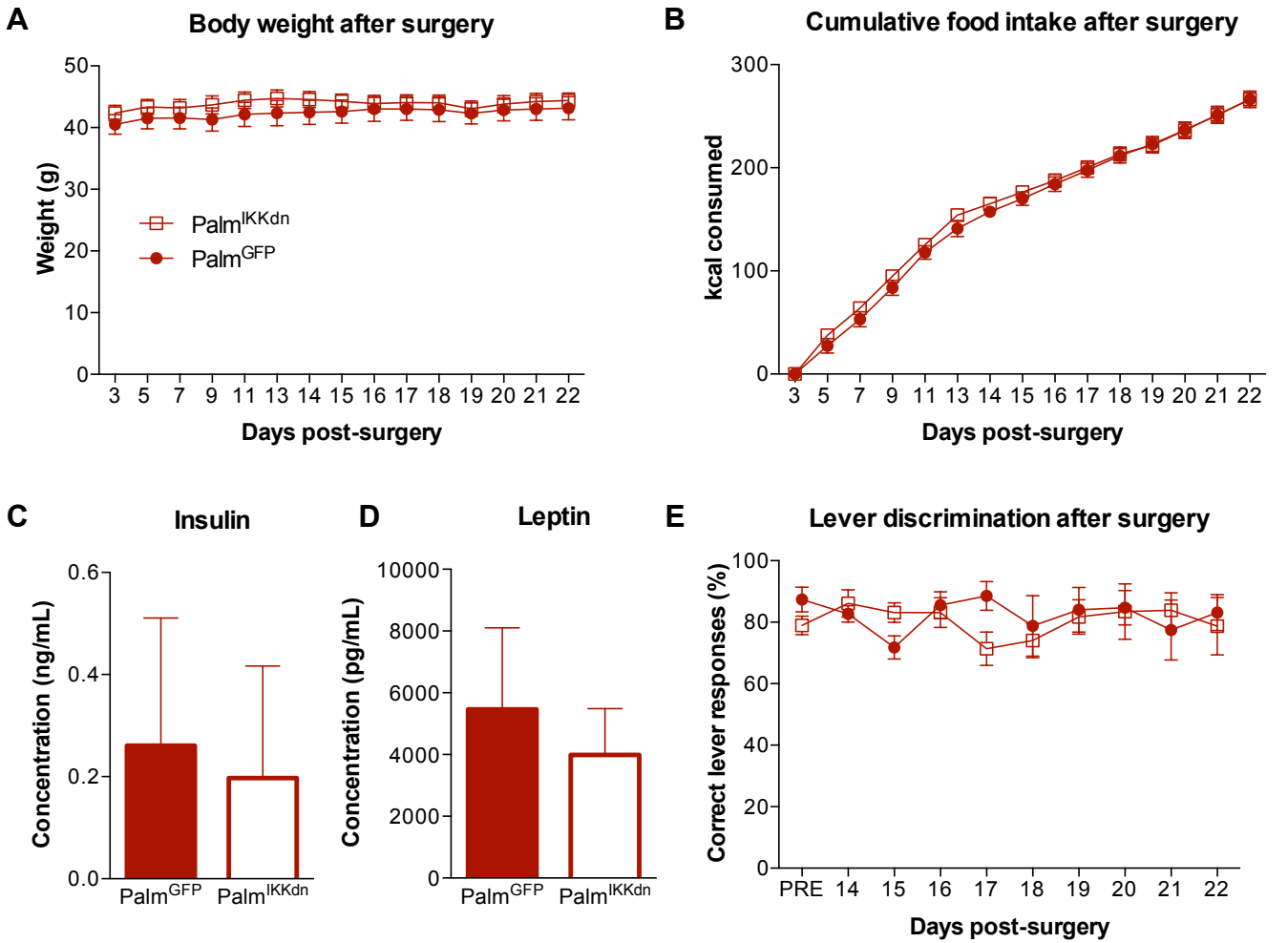

Figure S4. Nucleus accumbens IKK/NFκB inhibition does not affect body weight, food intake, lever discrimination or plasma levels of insulin and leptin. (A, B) Changes in sucrose motivation are not related to differential effects of Ad^{IKKdn} and Ad^{GFP} adenovirus on body weight nor food intake and lever discrimination after stereotaxic surgery (n=5-6/group). **(C, D)** Circulating levels of insulin and leptin are also unaffected by viral intervention (n=6-8/group). **(E)** Preference for correct lever is also unaltered by viralintervention (n=5-6/group). Group mean ± SEM; two-way analysis of variance, Bonferroni post hoc and unpaired t-test.