



ESM Fig. 7 (a) No significant cell size differences of fat pad, (b) serum adiponectin levels and (c) insulin tolerance from *Chop*^{+/+} and *Chop*^{-/-} mice fed HFD for 13 weeks. Representative images of adipose tissues from *Chop*^{+/+} and *Chop*^{-/-} mice fed a HFD for 13 weeks are shown in (a). Scale bar indicates 100 μ m. (b) Serum adiponectin levels. Sera were collected after 4-6 h fasting from *eIF2 α ^{S/A}* and *eIF2 α ^{S/S}* mice fed HFD for 13 weeks. Serum adiponectin levels were measured using adiponectin ELISA kit (EMD Millipore, Bilerica, MA, USA) according to manufacturer's instruction. c Insulin tolerance test (ITT). *Chop*^{+/+} (n=5) and *Chop*^{-/-} mice fed HFD for 13 weeks were challenged with insulin (0.75 U/kg body weight) and blood glucose levels were measured.