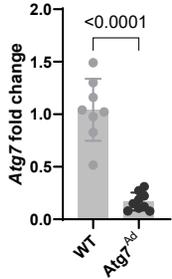
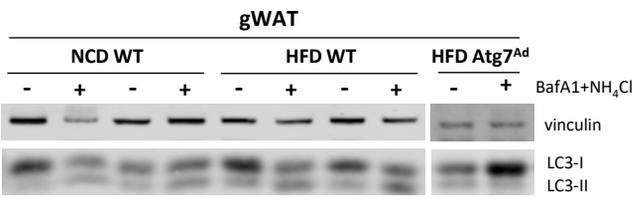


Sup. Fig. 1: Validation of *Atg7<sup>Ad</sup>* mouse model to study the role of autophagy in diet-induced obesity.

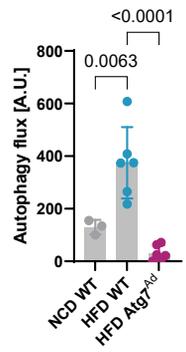
**A**



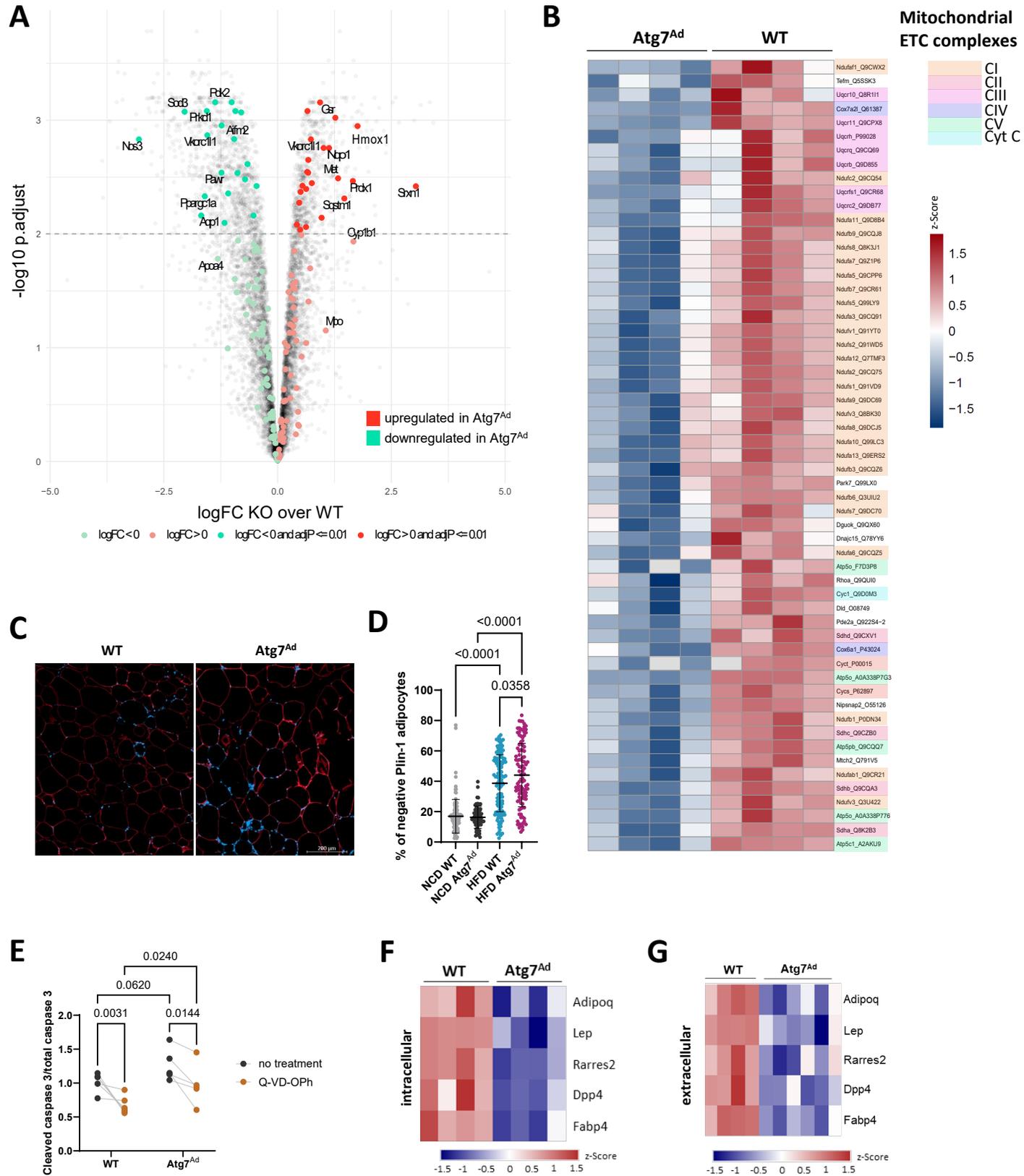
**B**



**C**

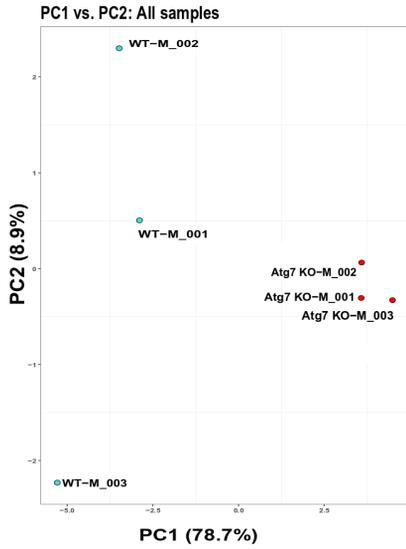


Sup. Fig 2: Loss of autophagy induces a stress response and cell death, and profoundly disturbs mitochondrial homeostasis.

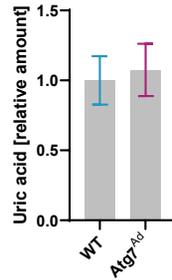


# Sup. Fig 3: Metabolomics analysis reveals a prominent role of autophagy in amino acid metabolism.

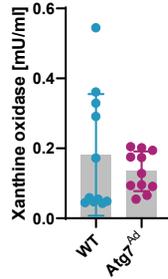
**A**



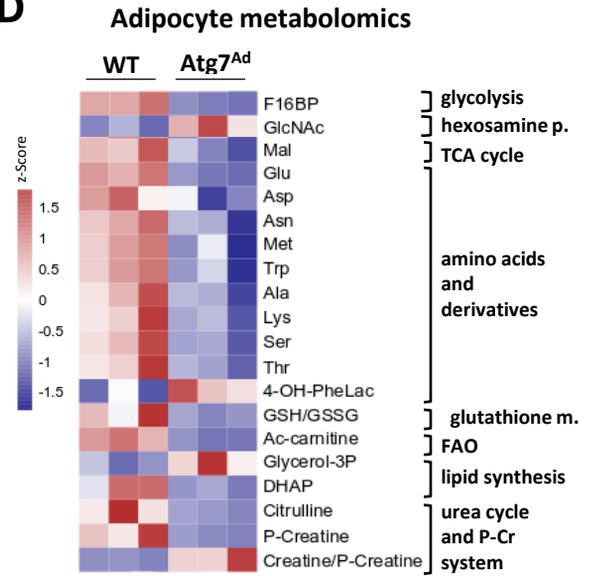
**B**



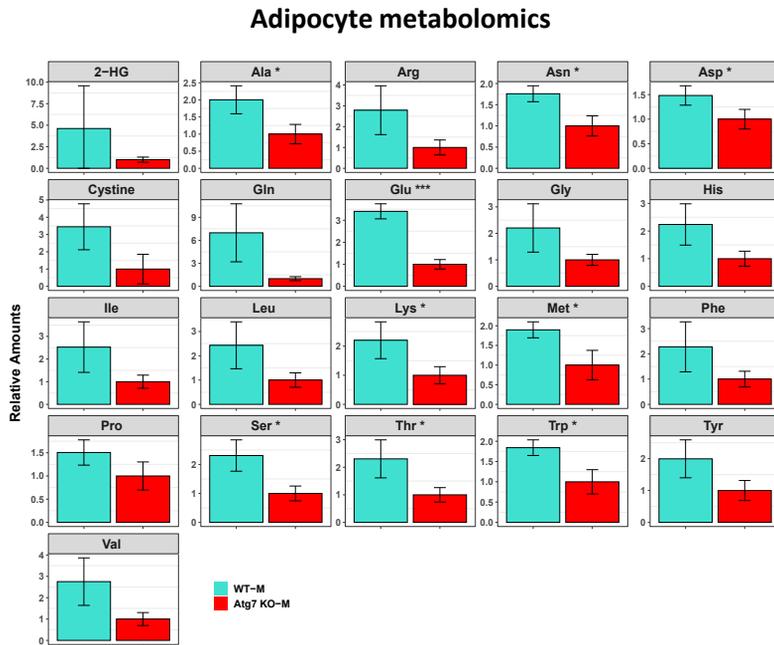
**C**



**D**

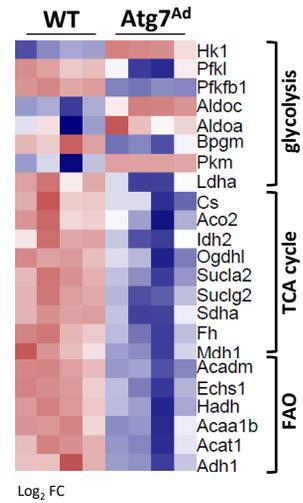


**E**

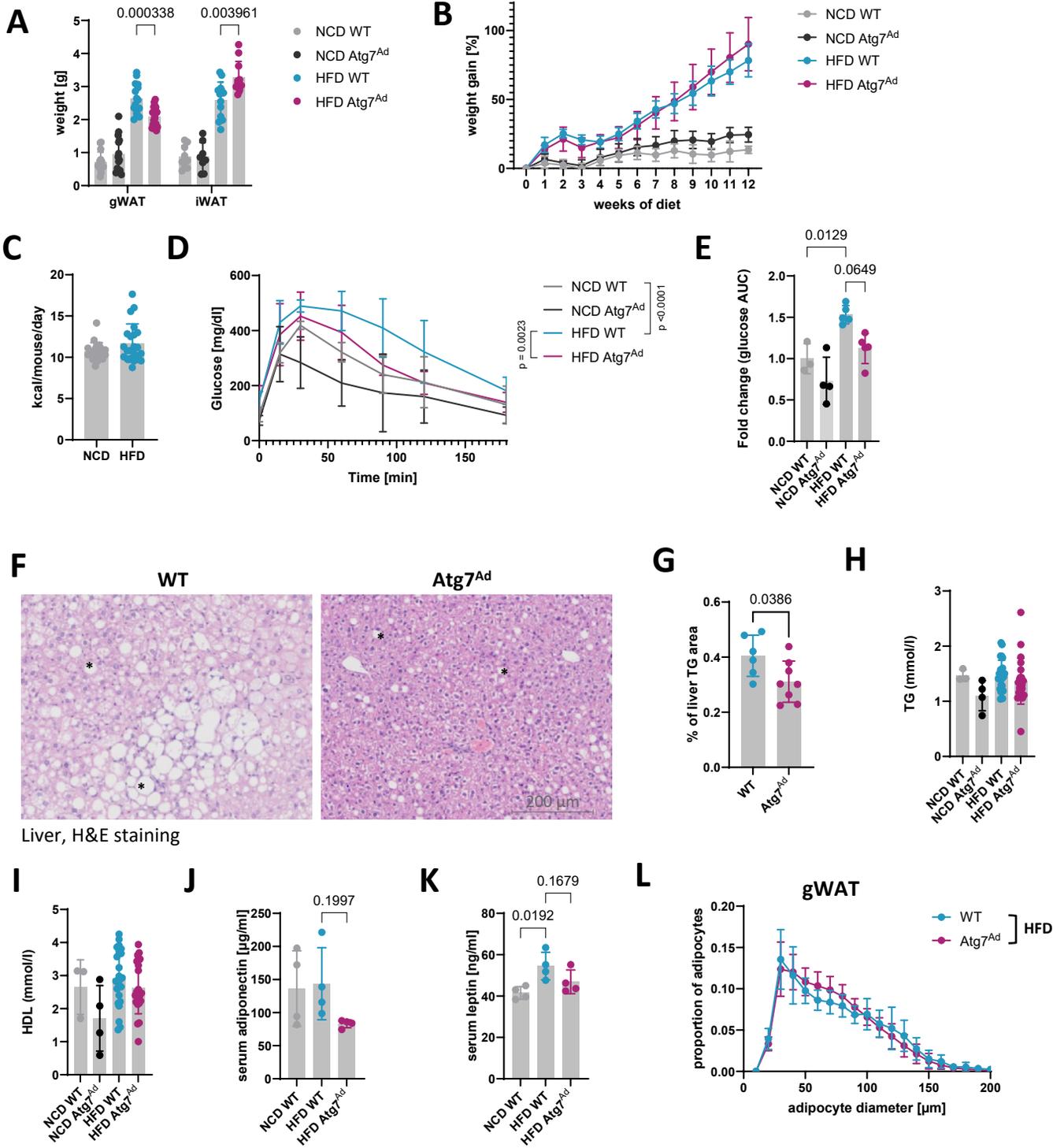


**F**

## Adipocyte proteomics

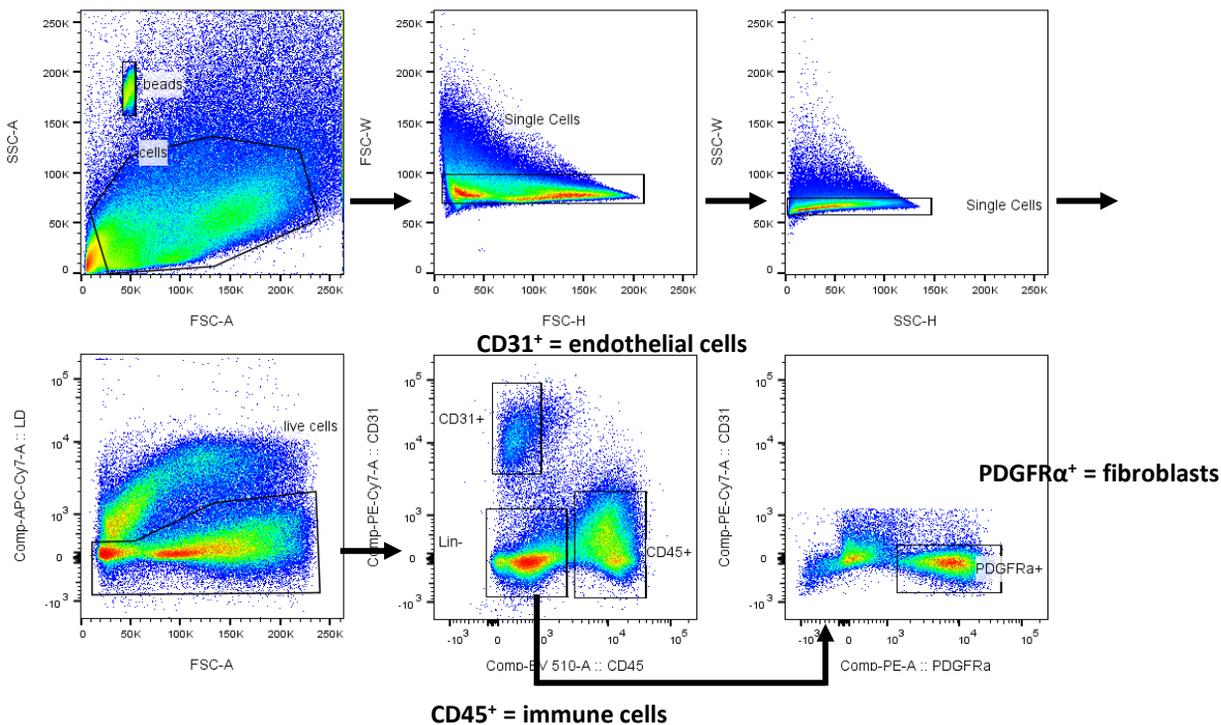


Sup. Fig 4: The absence of adipocyte autophagy ameliorates metabolic syndrome in diet-induced obese mice.



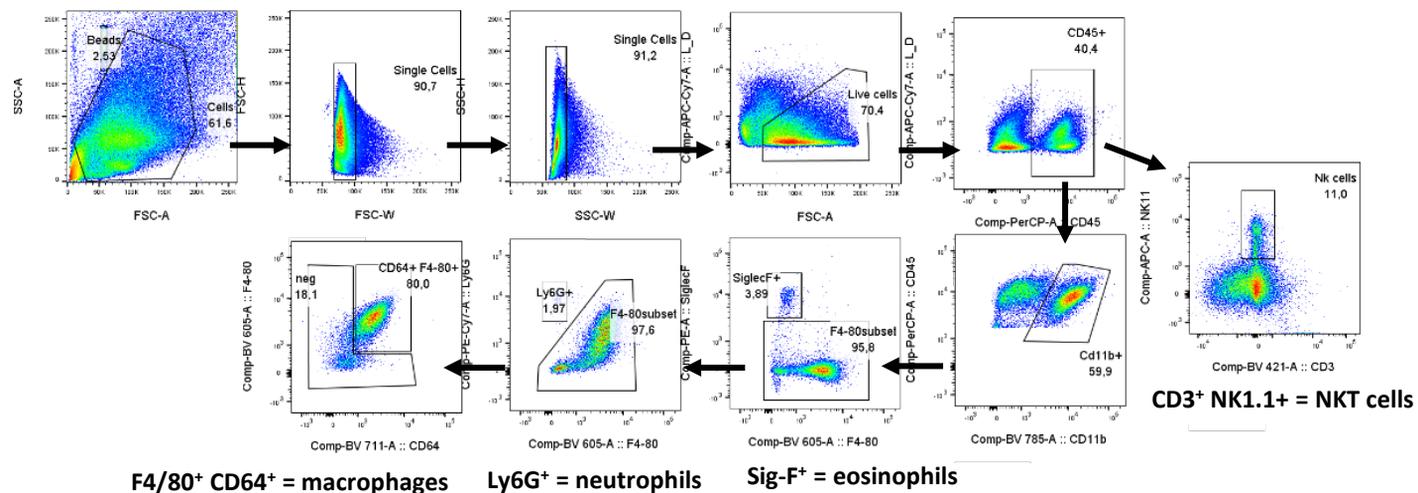
Sup. Fig 5: Gating strategies to determine cellular composition of WAT in Atg7<sup>Ad</sup> mice.

**A**



**B**

**Myeloid gating strategy**



**Lymphoid gating strategy**

