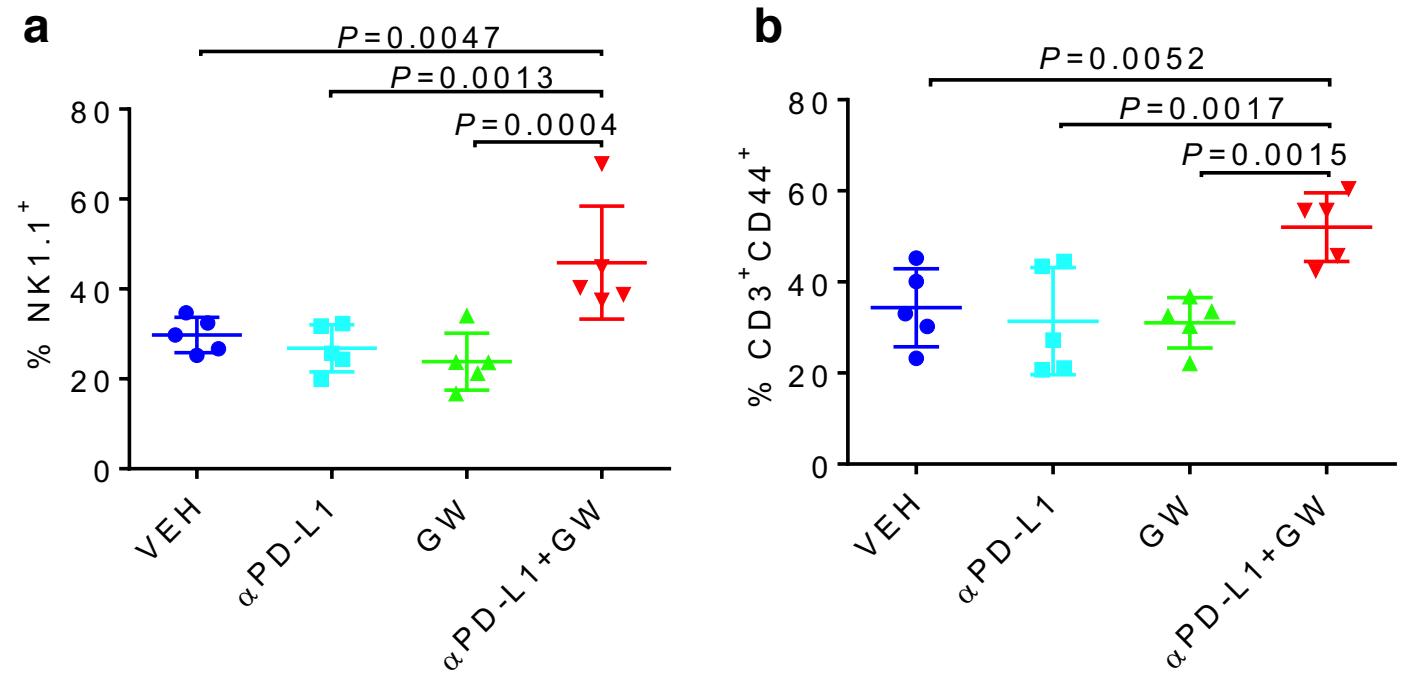


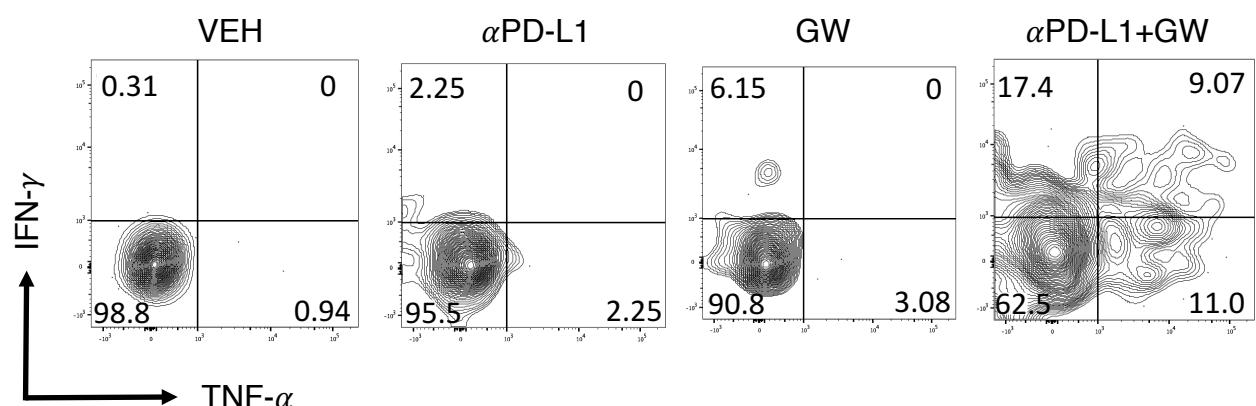
Supplemental Fig. 1 GW9662 +  $\alpha$ PD-L1 combination treatment increases TIL infiltration and activation in female mice



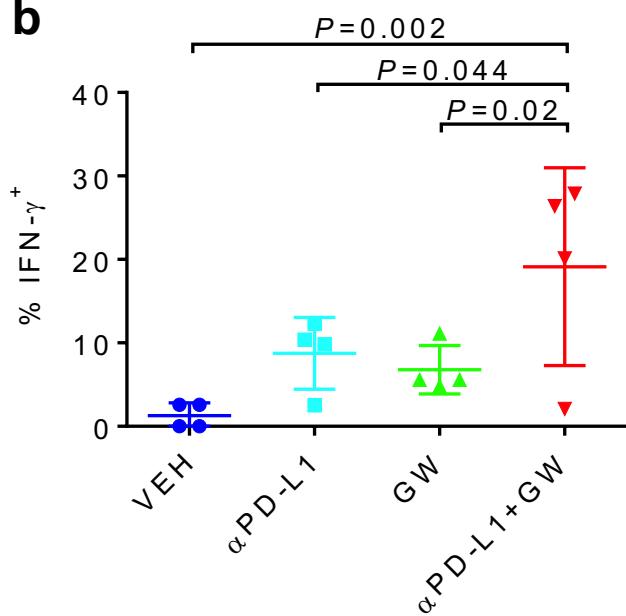
Supplemental Fig. 2 GW9662 + αPD-L1 combination treatment enhances antitumor immunity in CD4<sup>+</sup> TILs in female hosts

**a**

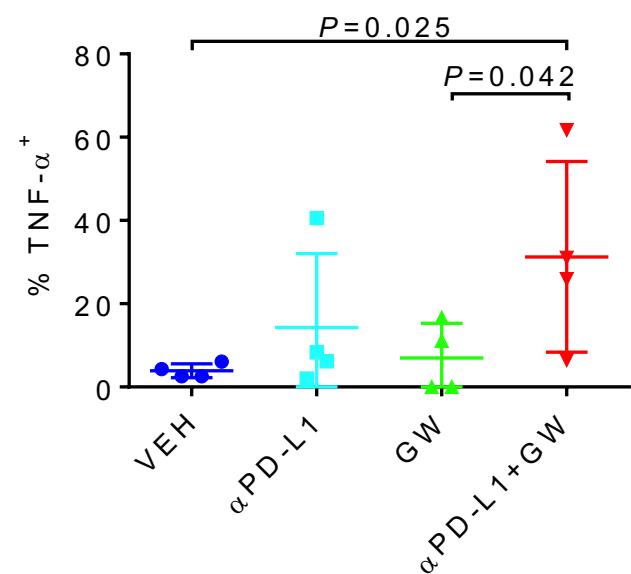
Gated on CD45<sup>+</sup>CD3<sup>+</sup>CD4<sup>+</sup> TILs



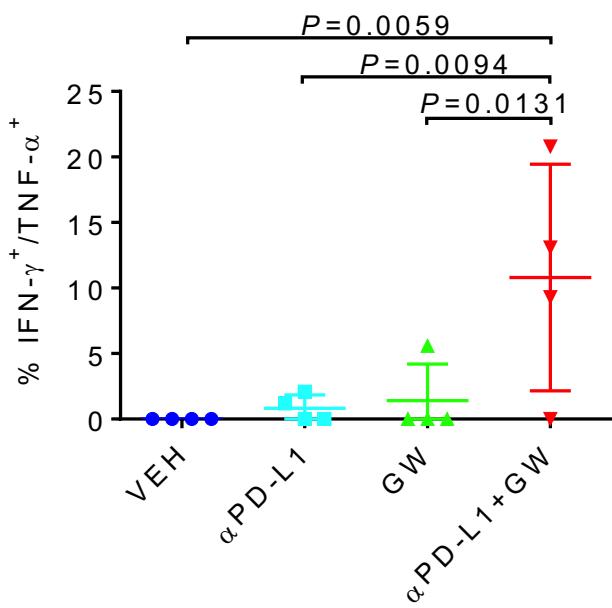
**b**



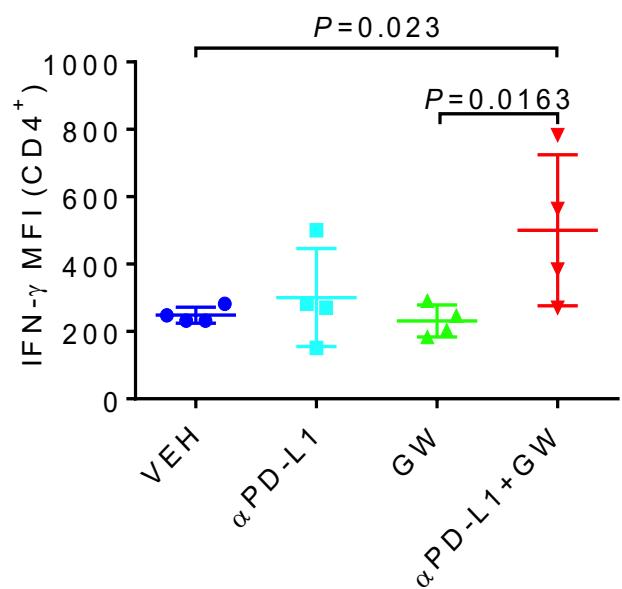
**c**



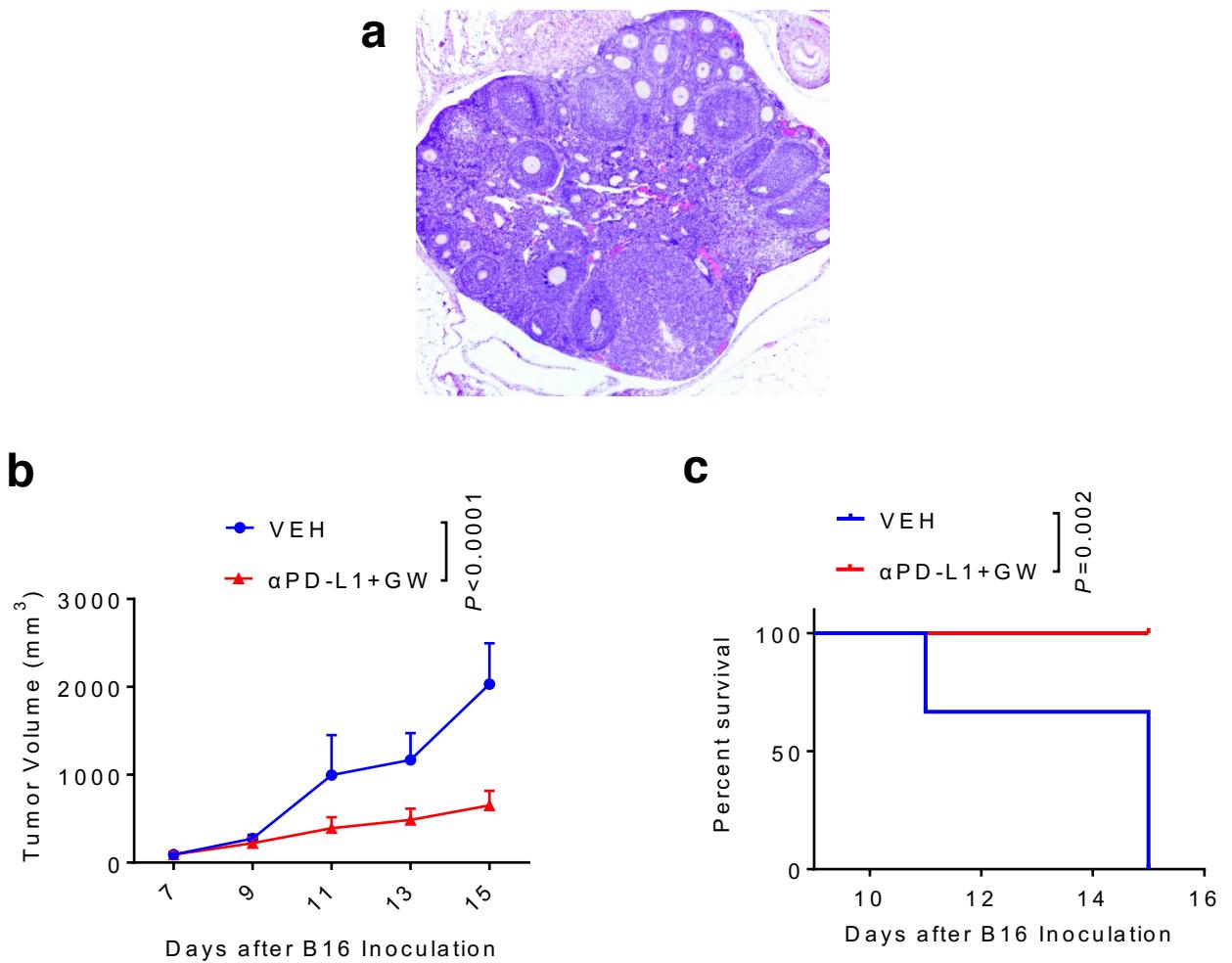
**d**



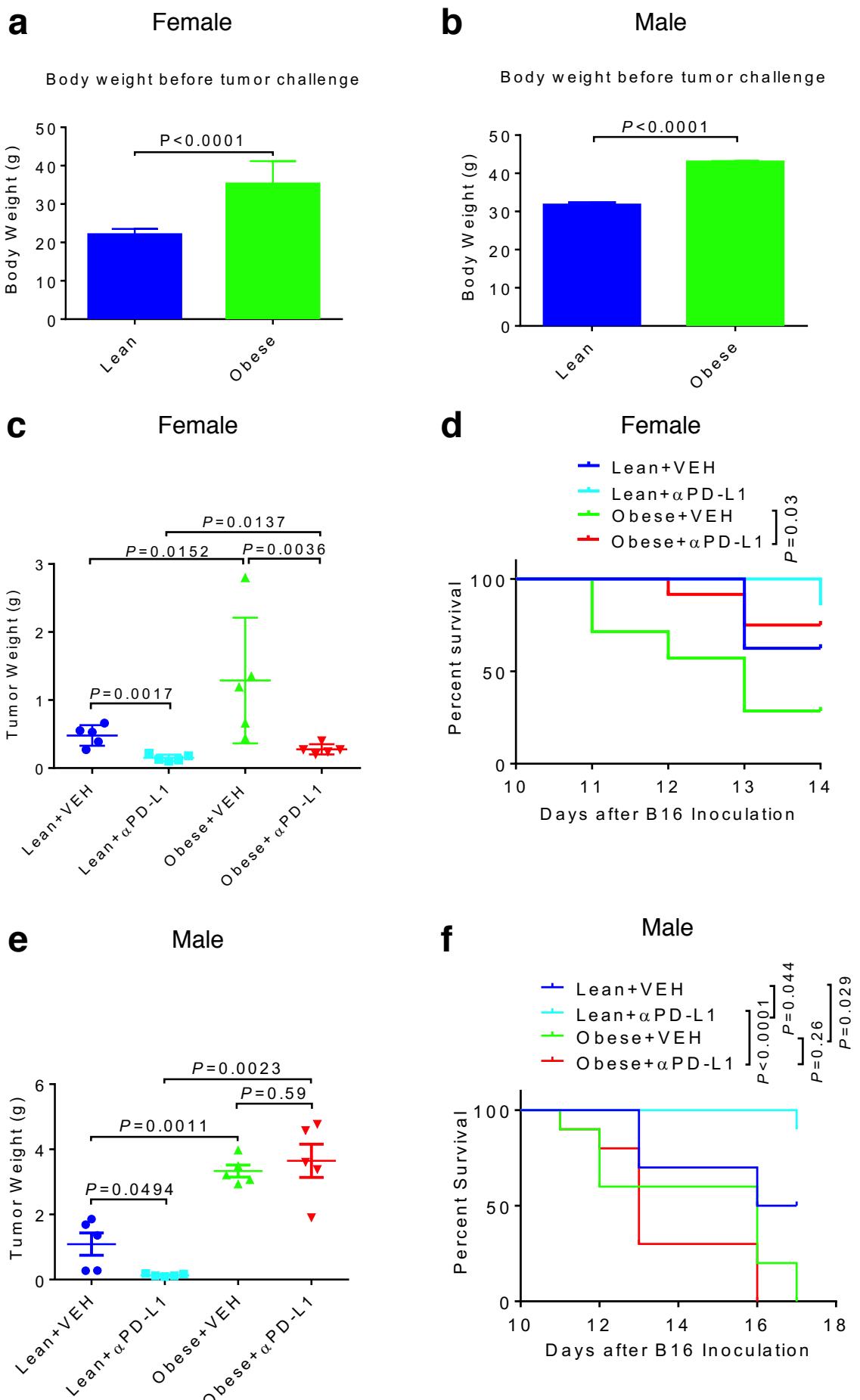
**e**



# Supplemental Fig. 3 Ovaries are dispensable for antitumor efficacy of αPD-L1+GW9662 treatment

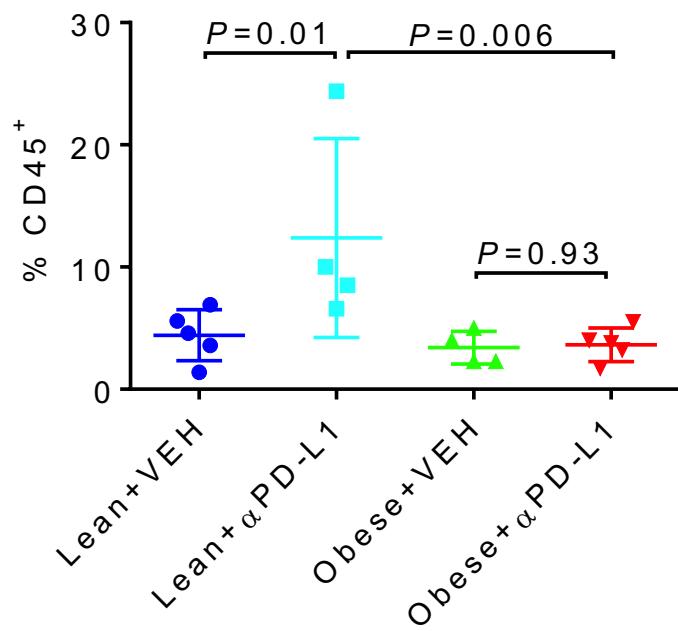


Supplemental Fig. 4 High-fat diet effect on B16 melanoma response to  $\alpha$ PD-L1 in male and female mice



Supplemental Fig. 5 Immuno-phenotyping of B16 tumor-bearing lean and obese male mice

**a**



**b**

