***In silico* analysis reveals EP300 as a panCancer inhibitor of anti-tumor immune response via metabolic modulation.**

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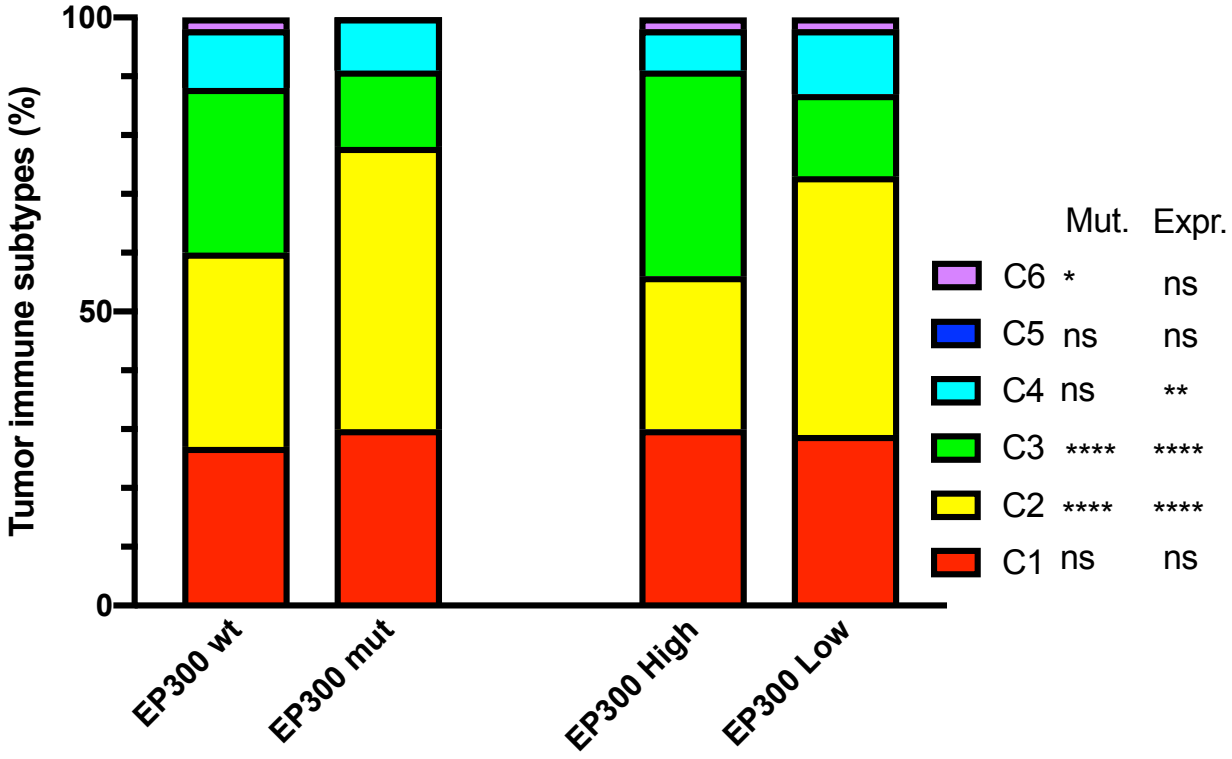
Supplementary figures

Suppl. figure 1



Suppl. figure 2

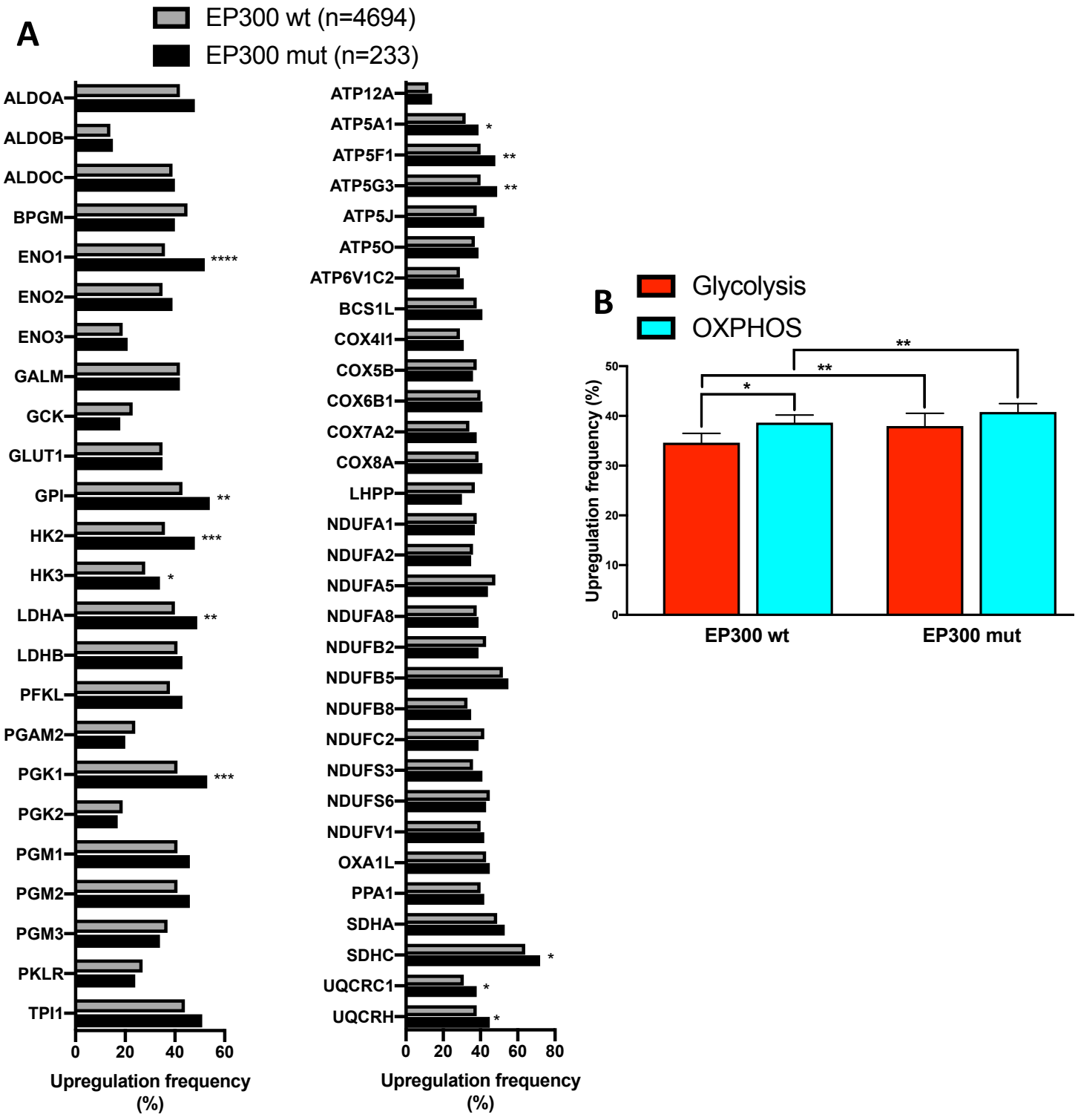


Figure legend supplementary figures:

Suppl. figure 1: Association of EP300 expression and mutation status with the tumor immune landscape across 18 solid malignancies. The distribution of the six immune profiles (C1 – C6), defined by Thorsson *et al.*, were compared between tumors with *EP300* wt and *EP300* mut status as well as EP300 high and low expression. The Interferon-γ dominant immune subtype C2 was significantly more frequent in *EP300* mut and EP300 low tumors. In contrast the inflammatory subtype C3 was more often found in *EP300* wt and EP300 high expressing tumors. Additionally EP300 low tumors had a higher number of C4 subtypes (lymphocyte depleted). C1: wound-healing, C2: Interferon-γ dominant, C3: inflammatory, C4: lymphocyte depleted, C5: immunologically quiet, C6: TGF-β dominant. wt: wildtype; mut: mutated; Mut: Mutation; Expr.: Expression; ns: not siginficant. *: $p<0.05$, **: $p<0.01$, ***: $P<0.001$, ****: $p<0.0001$.

Suppl. figure 2: PanCancer analyses of metabolic phenotypes in relationship to *EP300* mutation status: A) Upregulation frequency relative to number of analyzed tumors for *EP300* wt (n=4694) and *EP300* mut (n=233) displaying 24 genes involved in glycolysis and 31 genes invovled in OXPHOS. **B)** Relative upregulation frequency of glycolysis- and OXPHOS-associated genes with a subtle, but significant higher glycolysis- and OXPHOS-dependent metabolism in *EP300* mut tumors. *: $p<0.05$, **: $p<0.01$, ***: $P<0.001$, ****: $p<0.0001$.