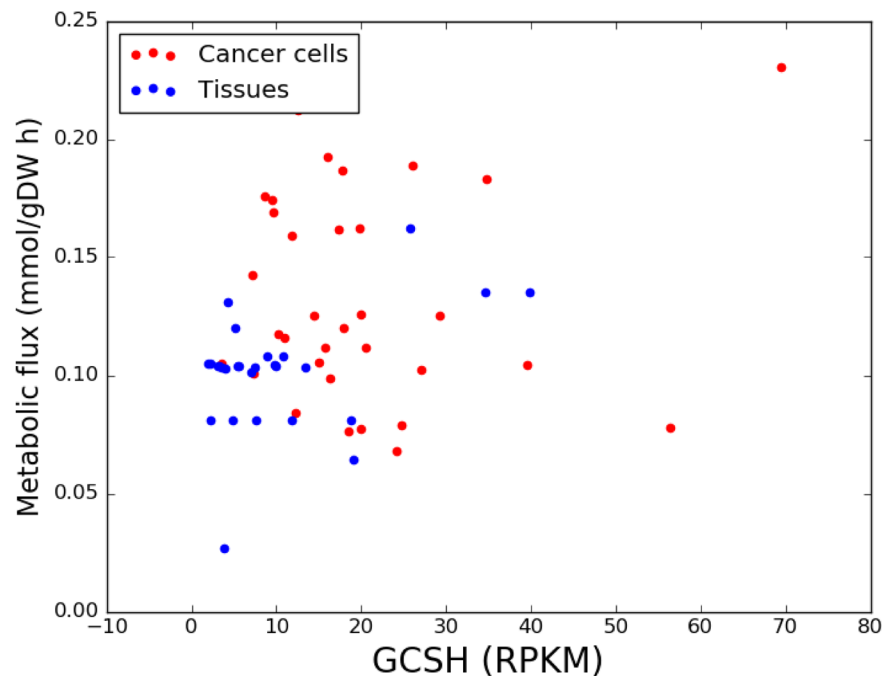


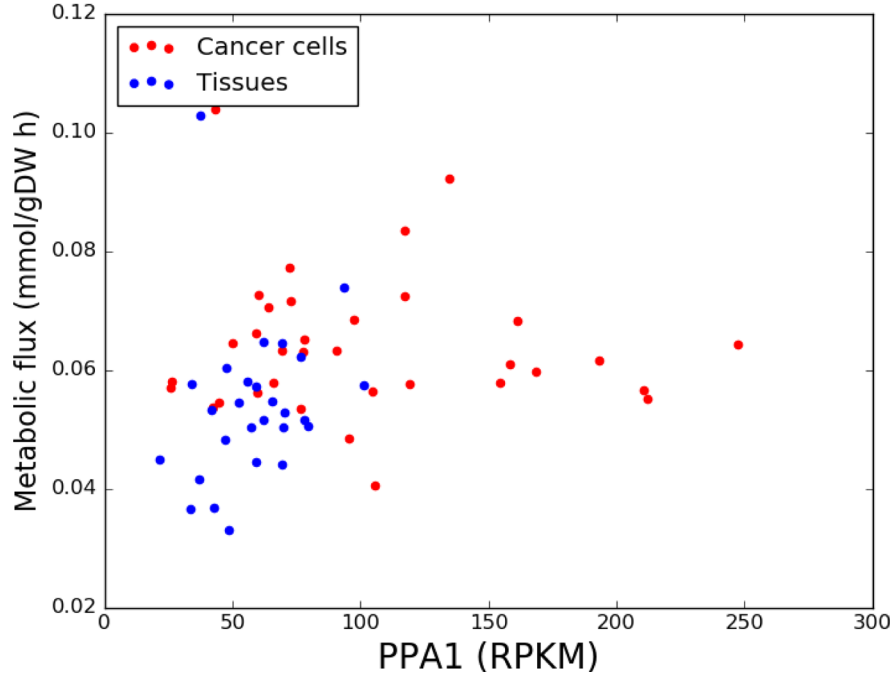
Constraint based modeling of metabolism allows finding metabolic cancer hallmarks and identifying personalized therapeutic windows

SUPPLEMENTARY MATERIALS

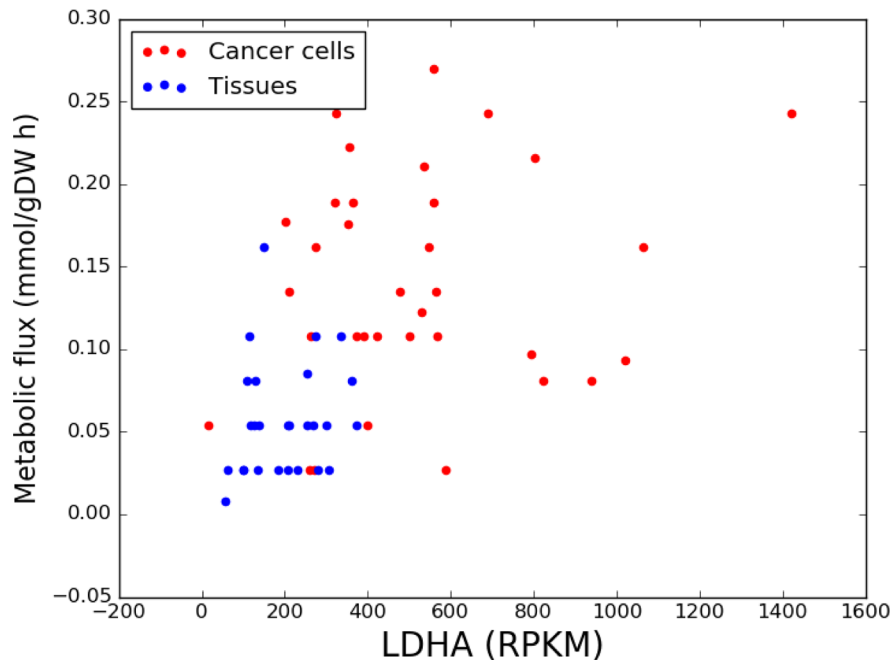
Measured gene expressions and predicted metabolic fluxes



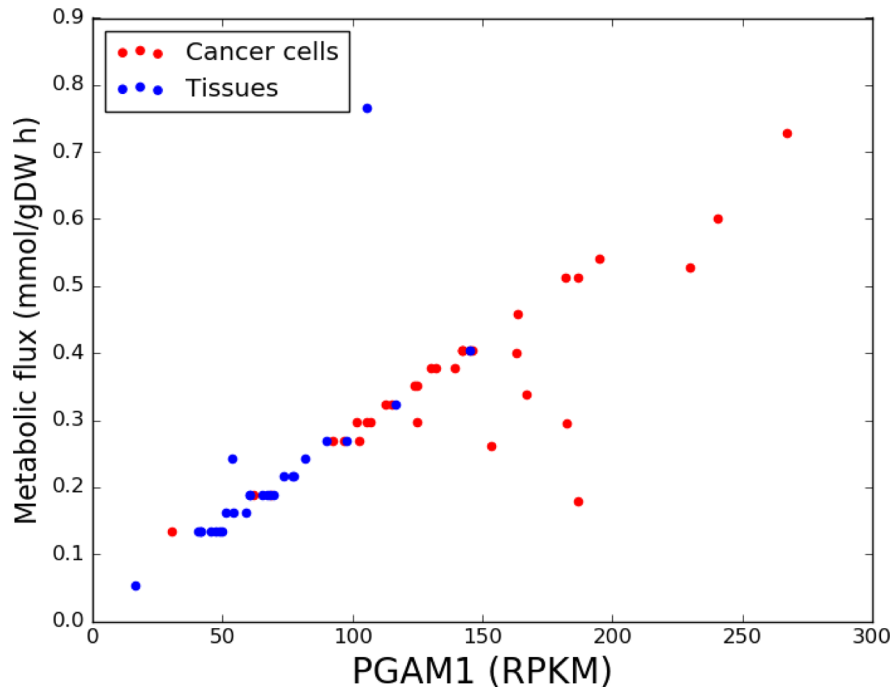
Supplementary Figure 1: Glycine cleavage system protein H.



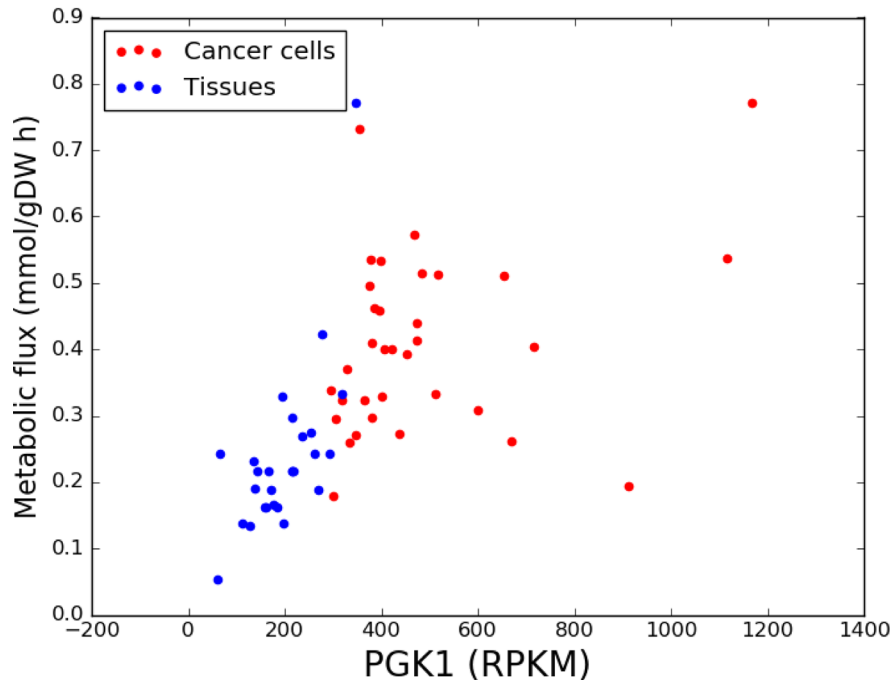
Supplementary Figure 2: Pyrophosphatase (Inorganic) 1.



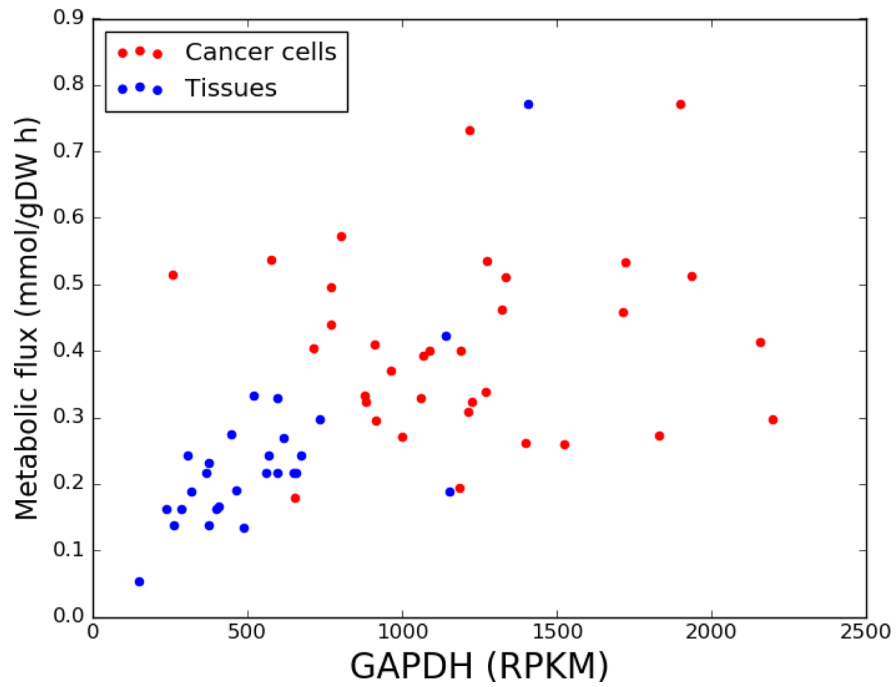
Supplementary Figure 3: Lactate dehydrogenase A.



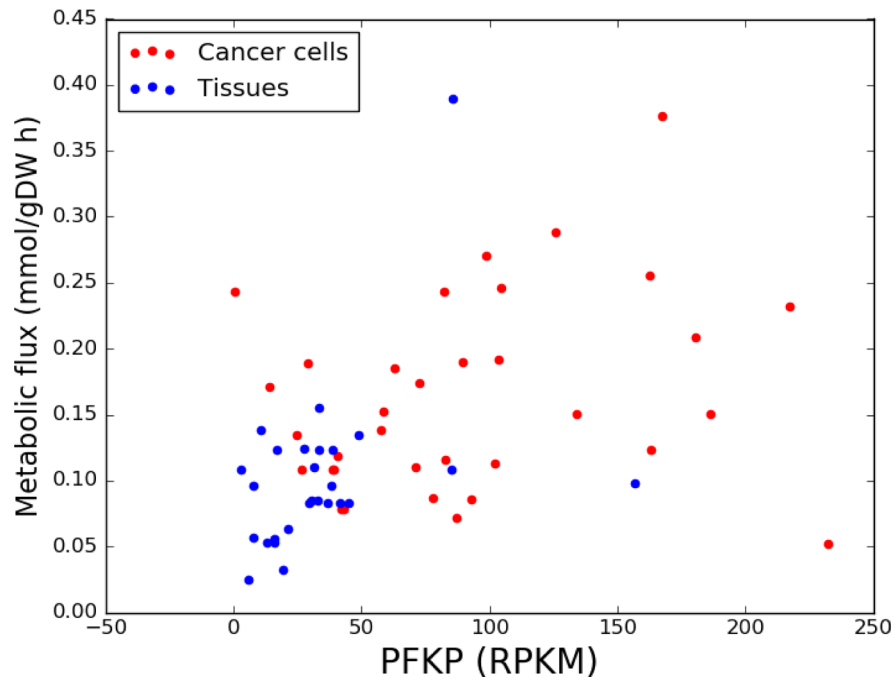
Supplementary Figure 4: Phosphoglycerate Mutase 1.



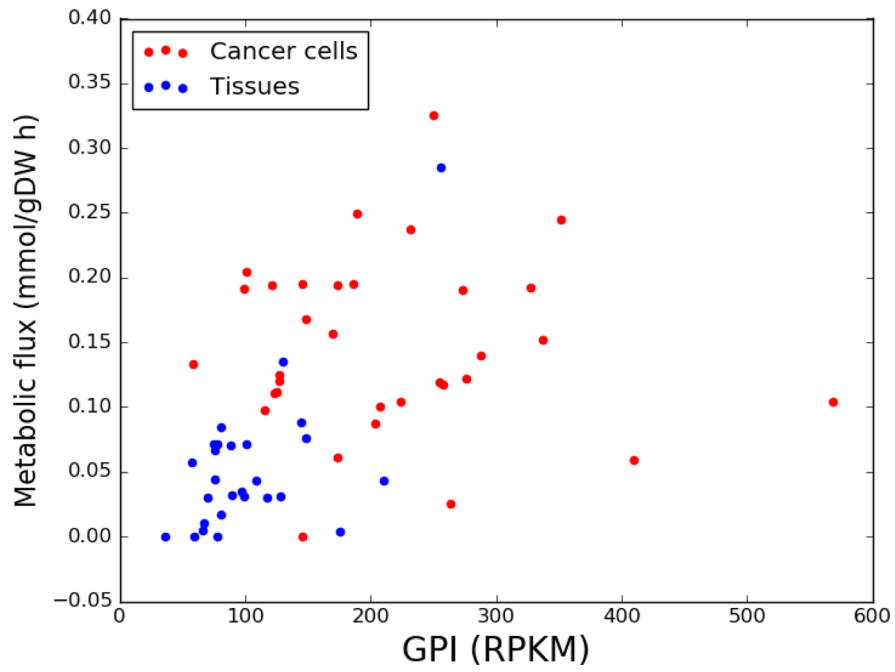
Supplementary Figure 5: Phosphoglycerate Kinase 1.



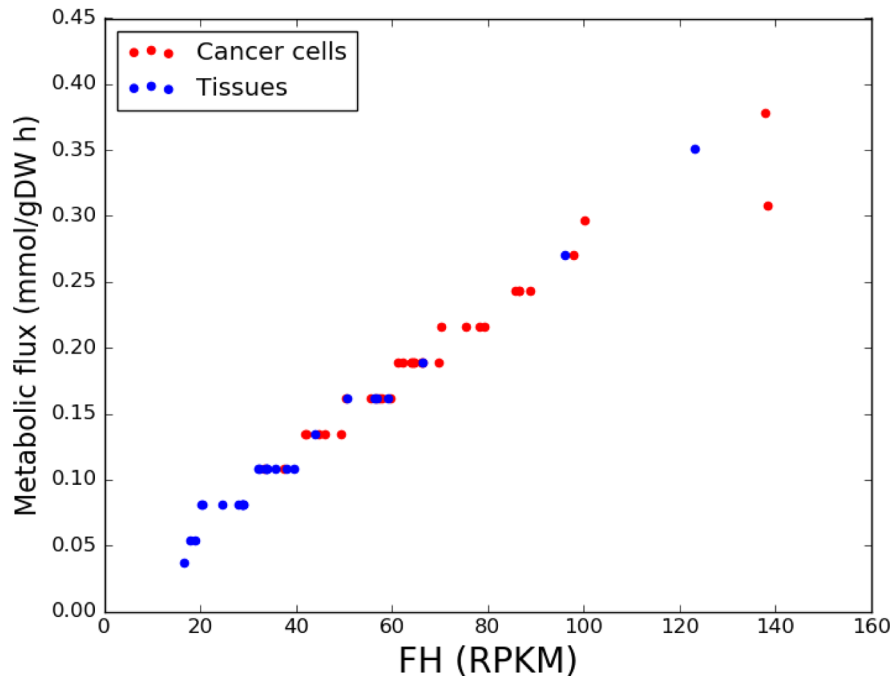
Supplementary Figure 6: Glyceraldehyde-3-Phosphate Dehydrogenase.



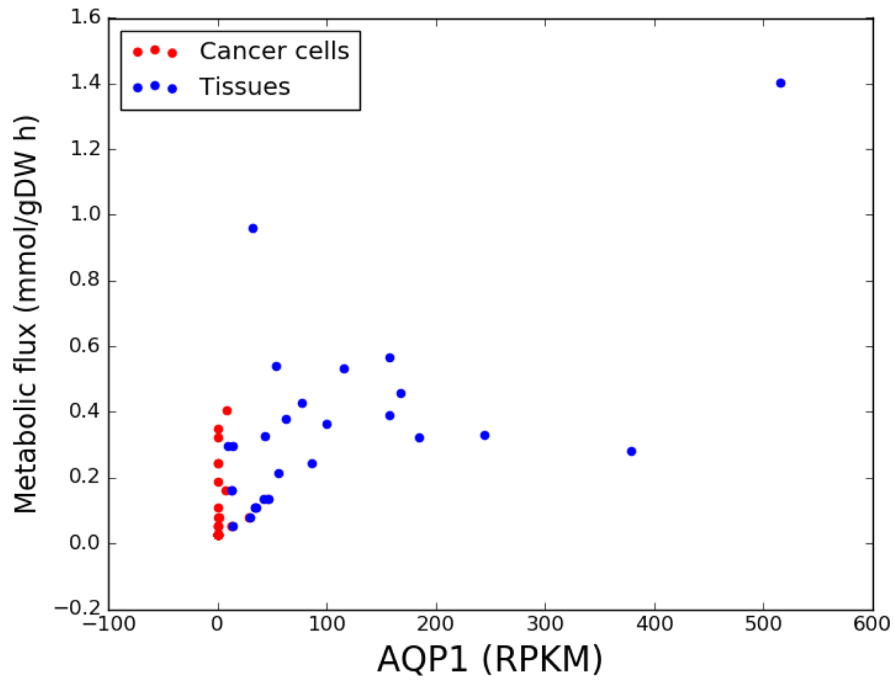
Supplementary Figure 7: Phosphofruktokinase, Platelet.



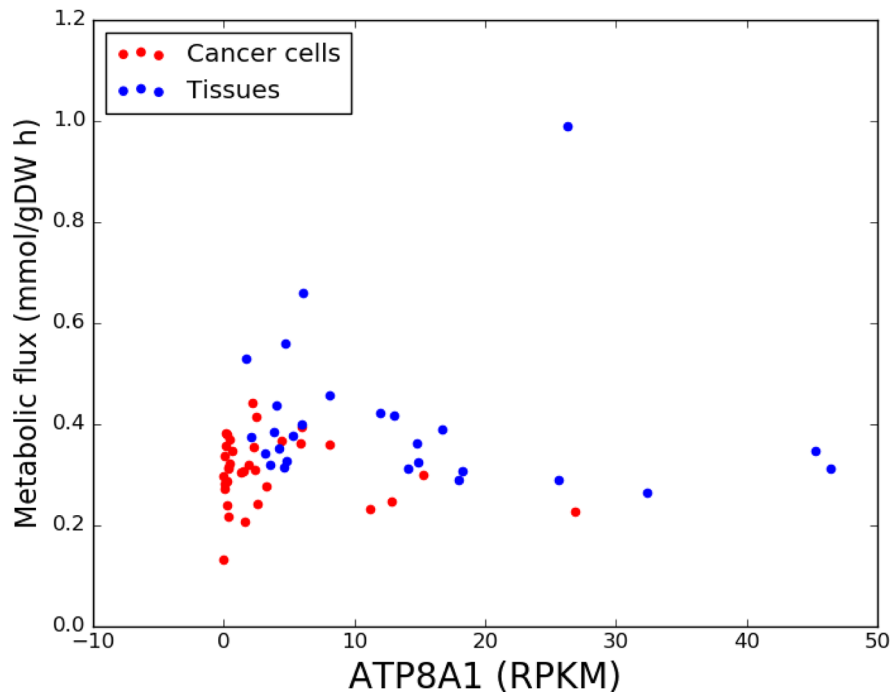
Supplementary Figure 8: Glucose-6-Phosphate Isomerase.



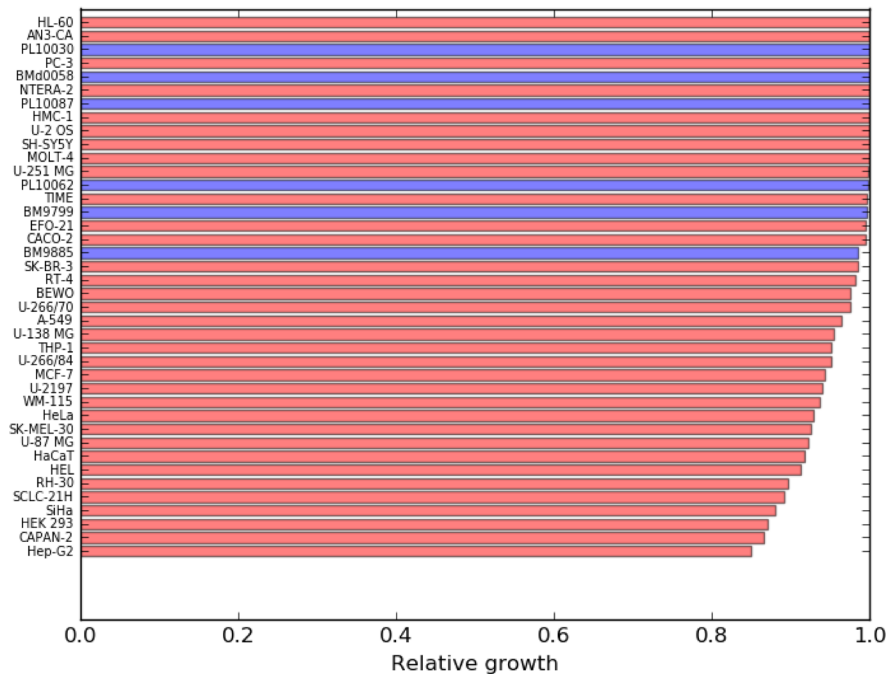
Supplementary Figure 9: Fumarate Hydratase.



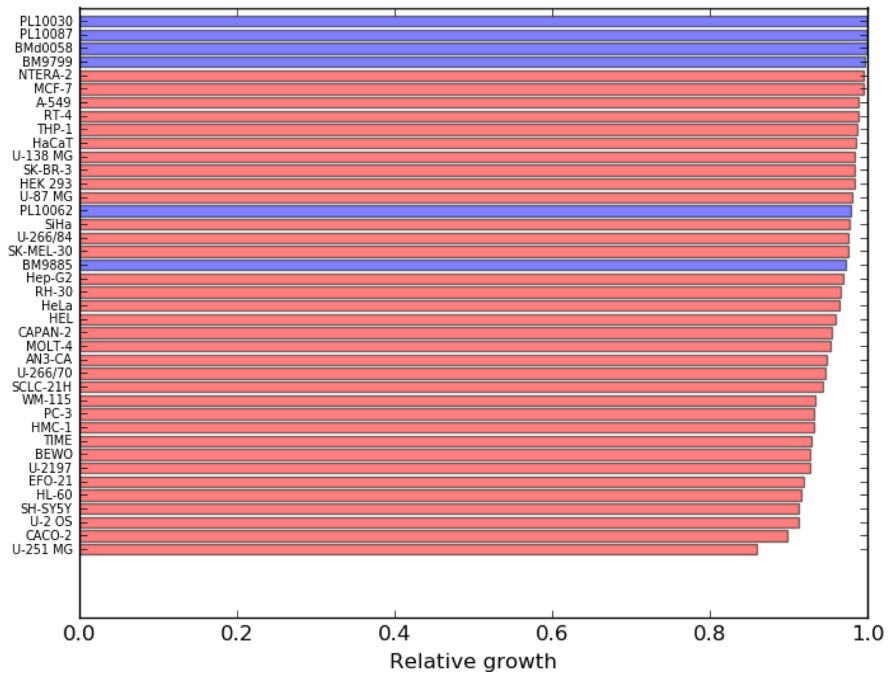
Supplementary Figure 10: Aquaporin 1.



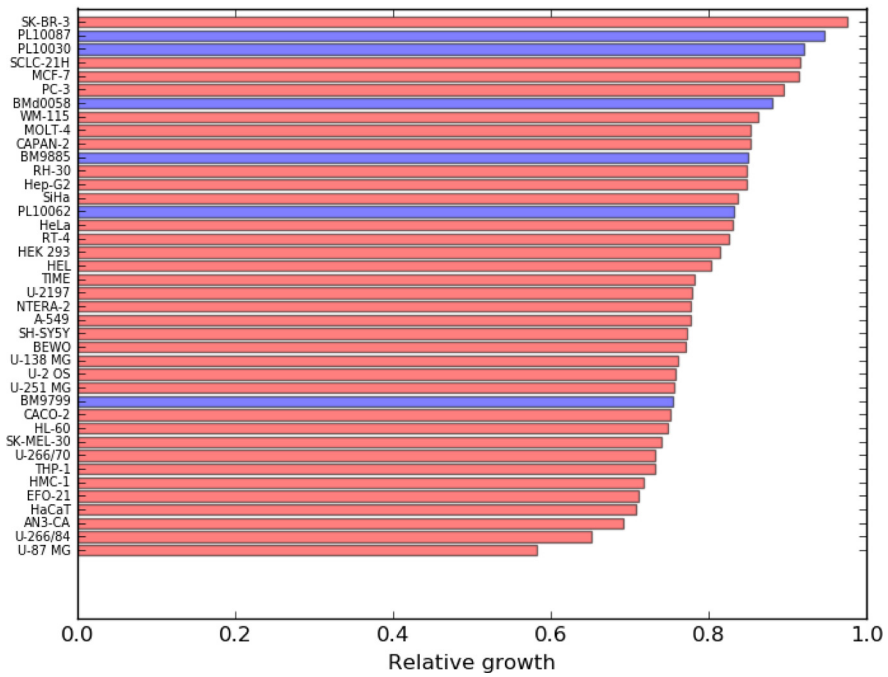
Supplementary Figure 11: ATPase Phospholipid Transporting 8A1.



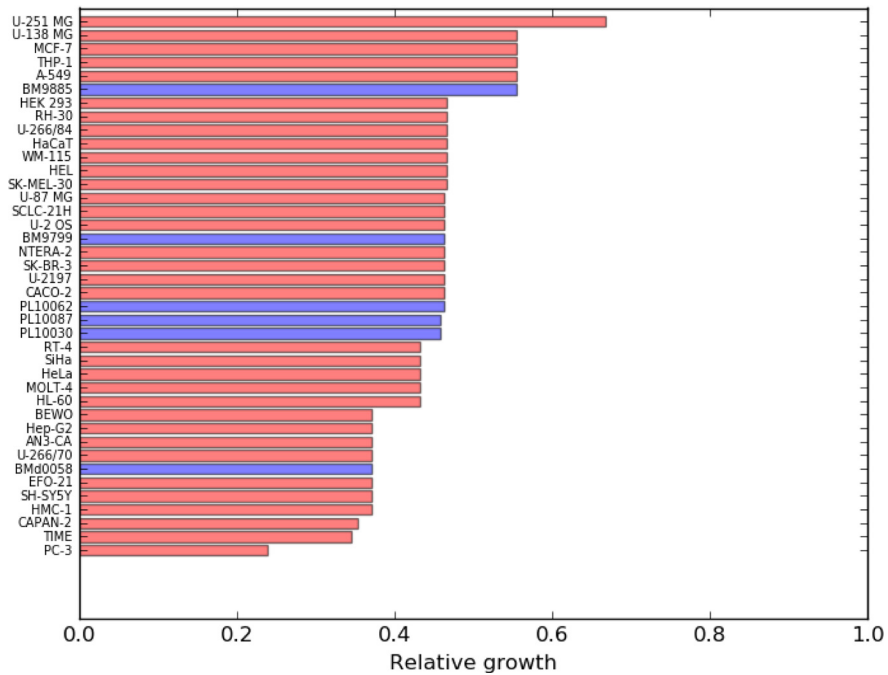
Supplementary Figure 12: Lactate production.



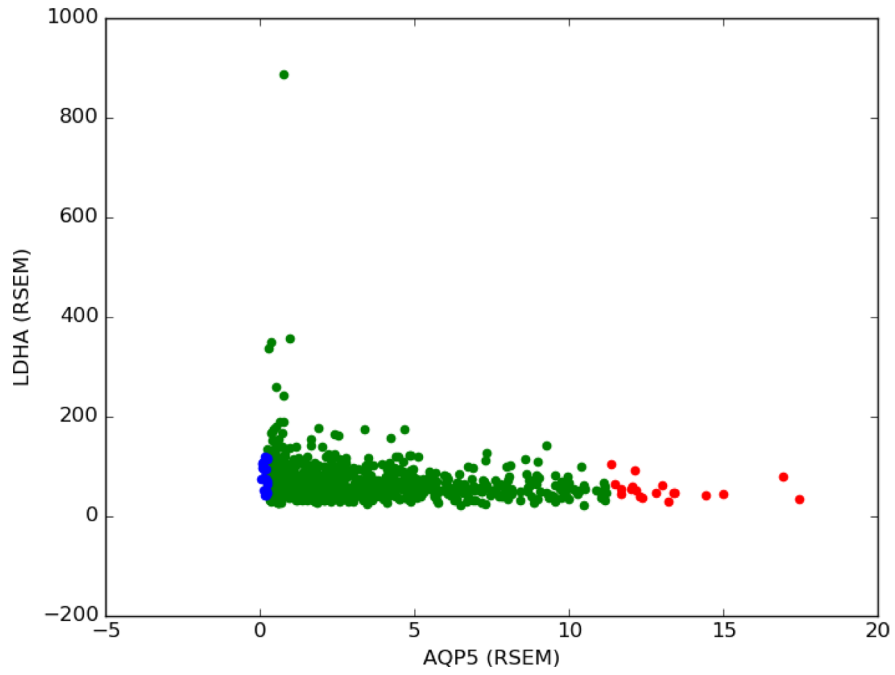
Supplementary Figure 13: Glycine cleavage system.



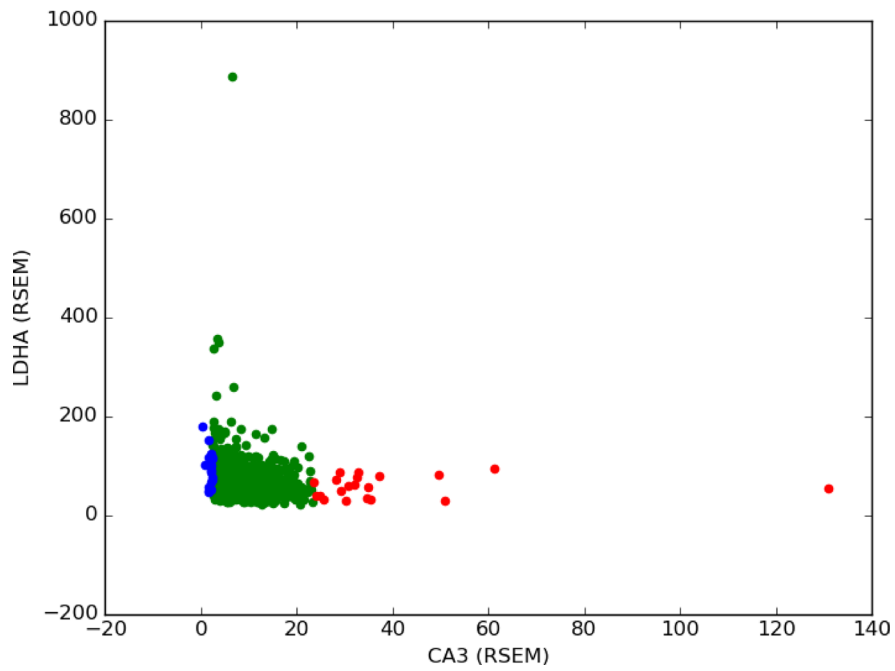
Supplementary Figure 14: Triosephosphate isomerase.



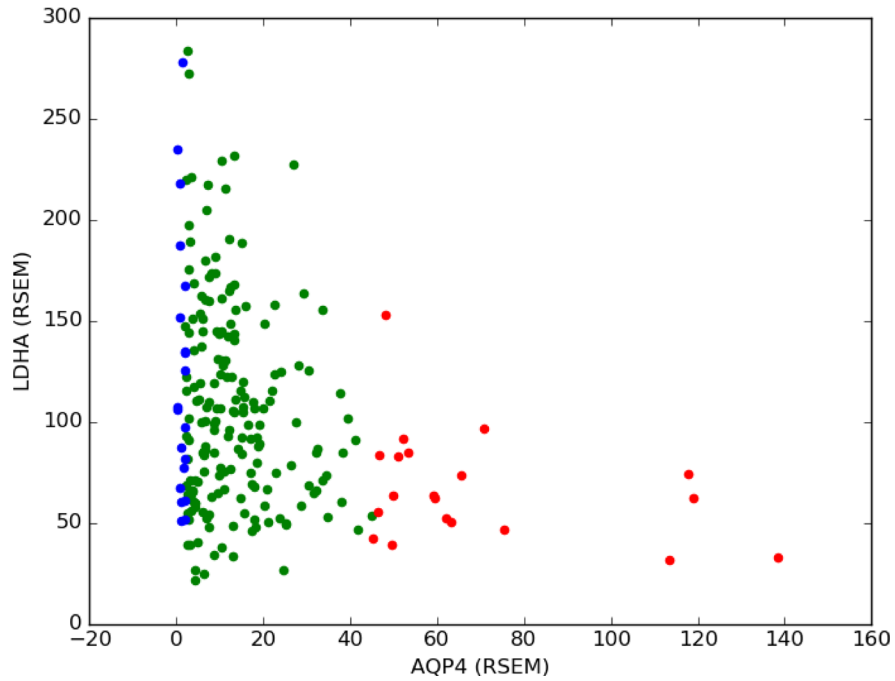
Supplementary Figure 15: Glycerol-3-Phosphate Acyltransferase.



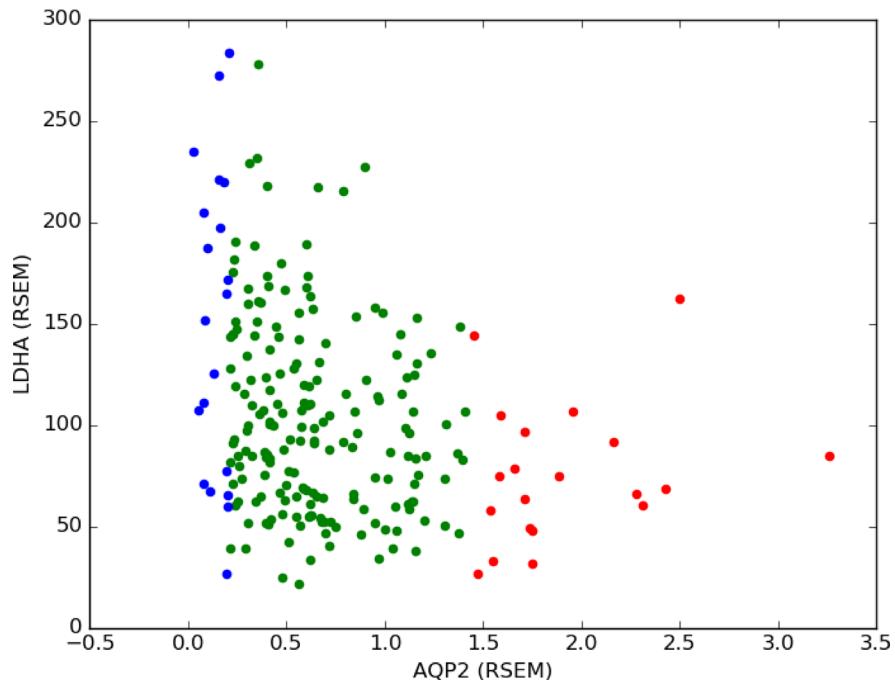
Supplementary Figure 16: Expression of the LDHA gene versus the expression of AQP5 in breast tumor samples.



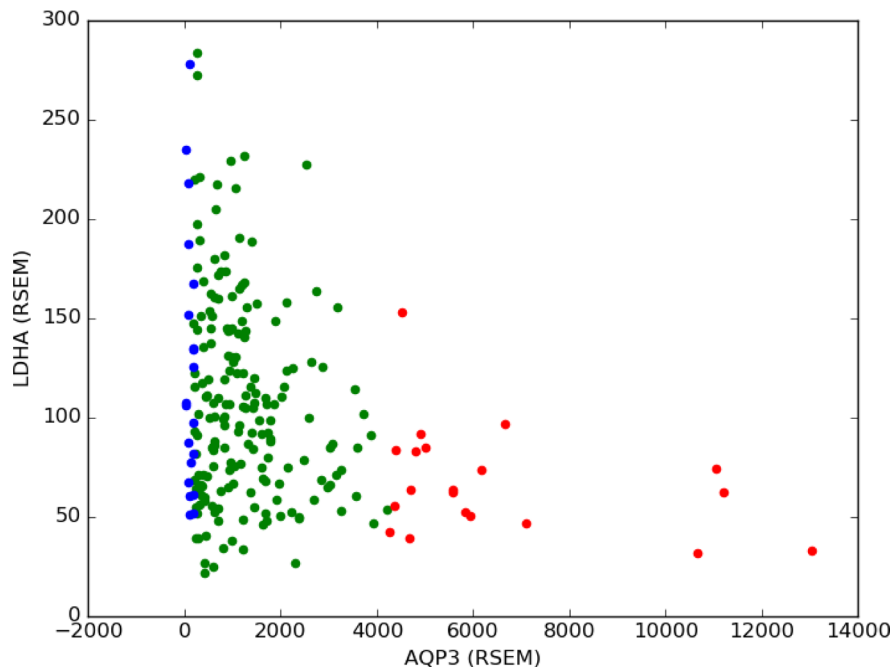
Supplementary Figure 17: Expression of the LDHA gene versus the expression of CA3 in breast tumor samples.



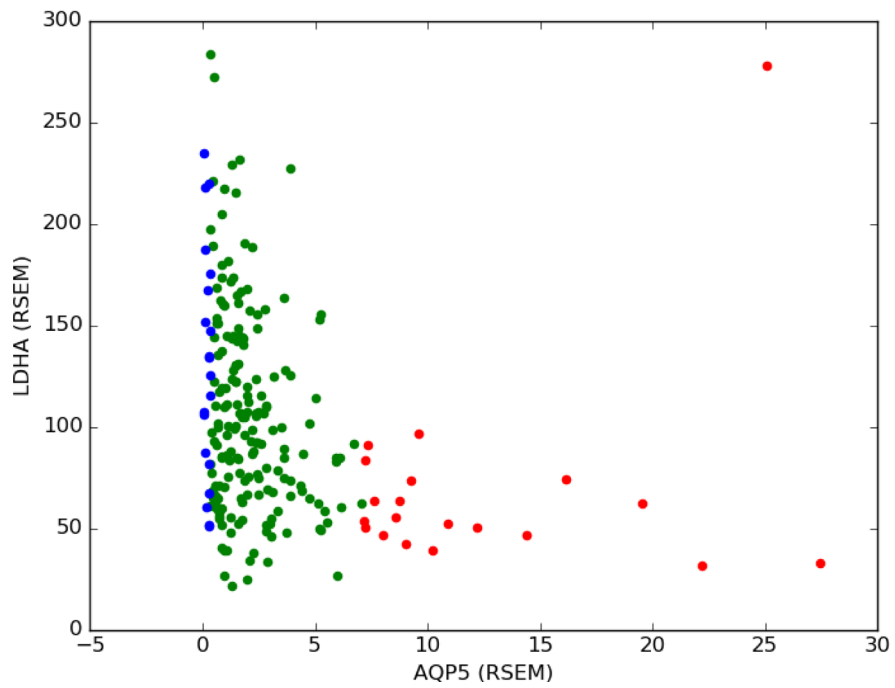
Supplementary Figure 18: Expression of the LDHA gene versus the expression of AQP4 in lung tumor samples.



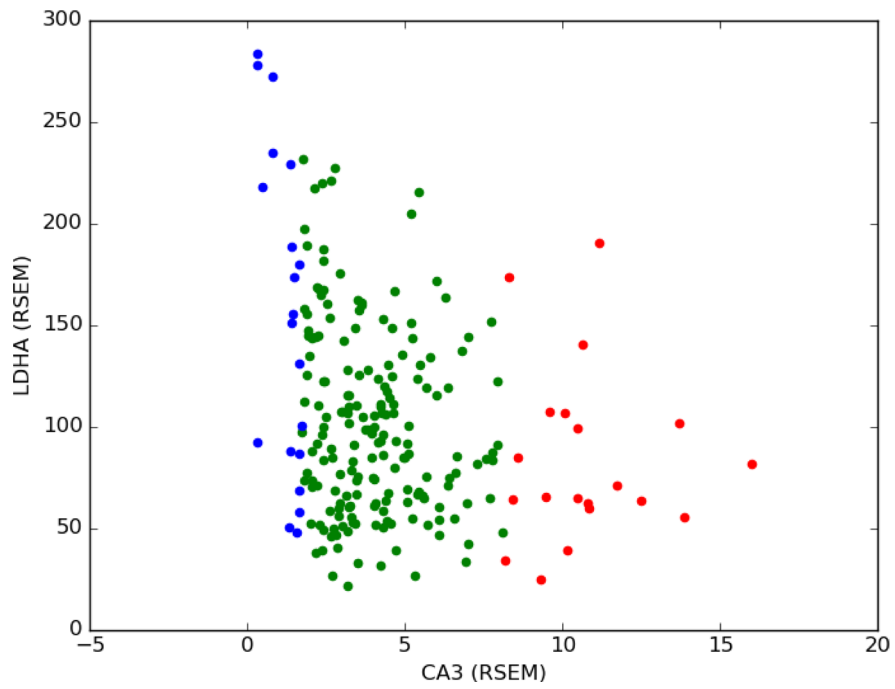
Supplementary Figure 19: Expression of the LDHA gene versus the expression of AQP2 in lung tumor samples.



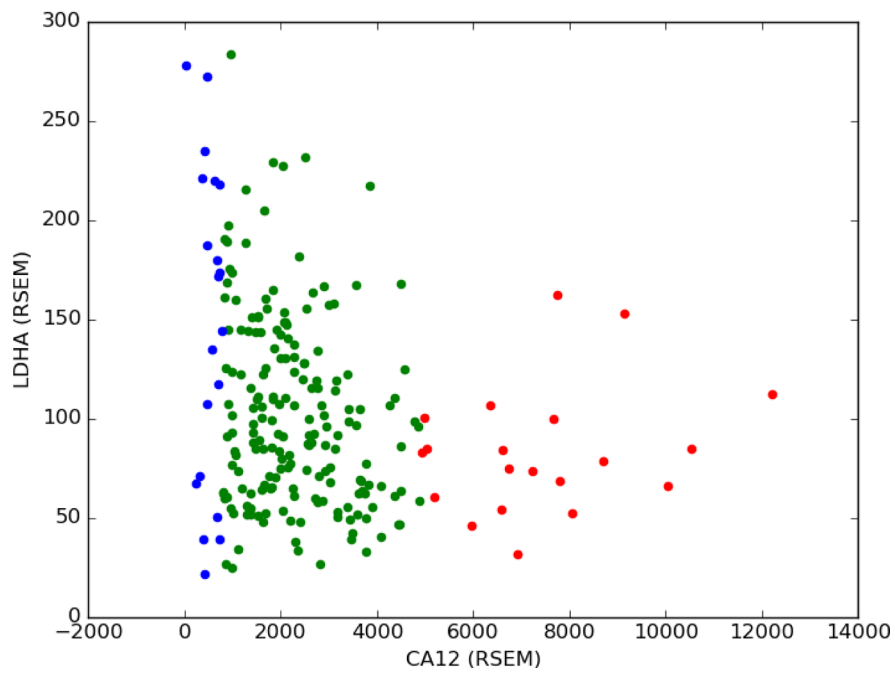
Supplementary Figure 20: Expression of the LDHA gene versus the expression of AQP3 in lung tumor samples.



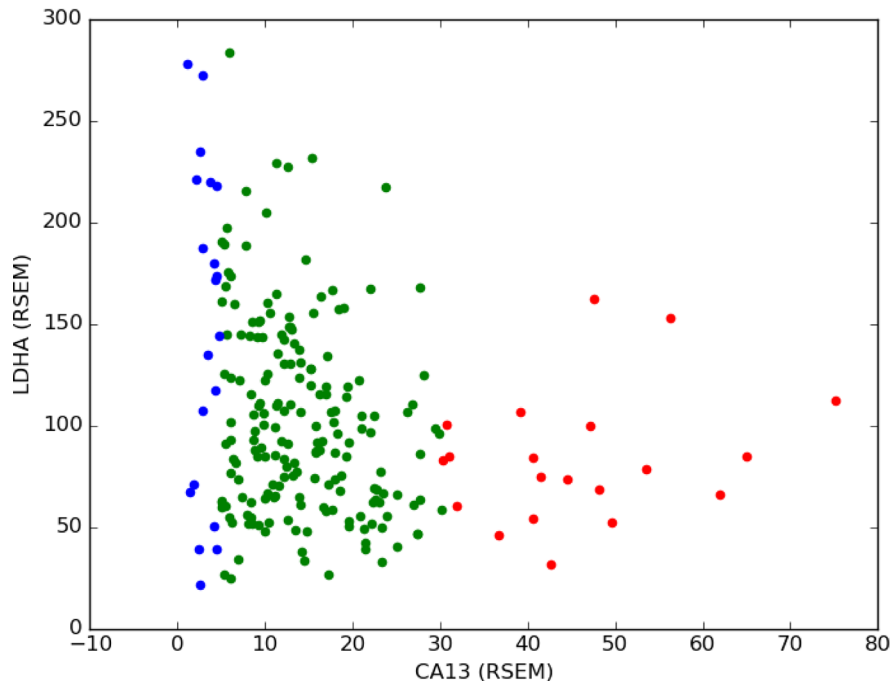
Supplementary Figure 21: Expression of the LDHA gene versus the expression of AQP5 in lung tumor samples.



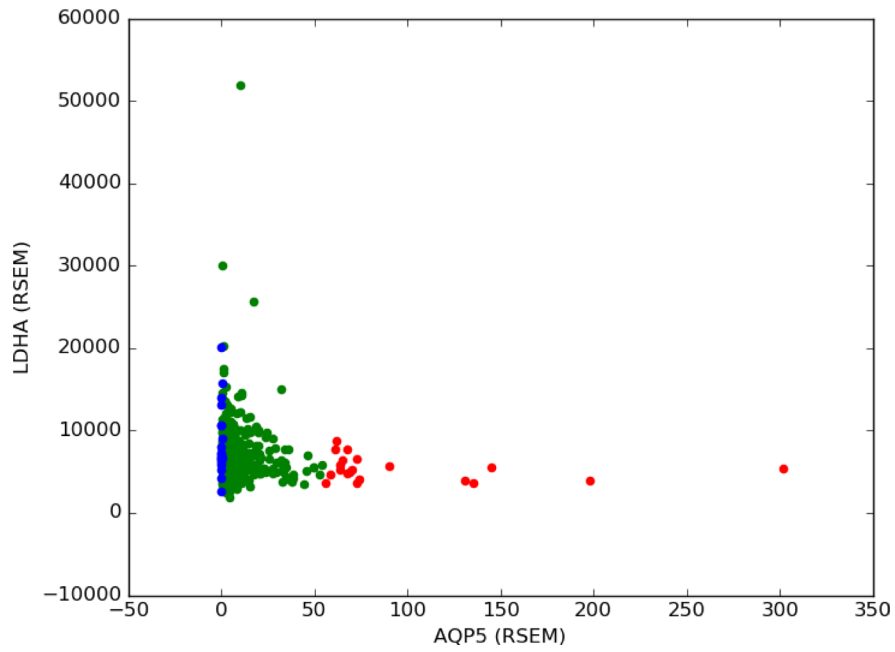
Supplementary Figure 22: Expression of the LDHA gene versus the expression of CA3 in breast tumor samples.



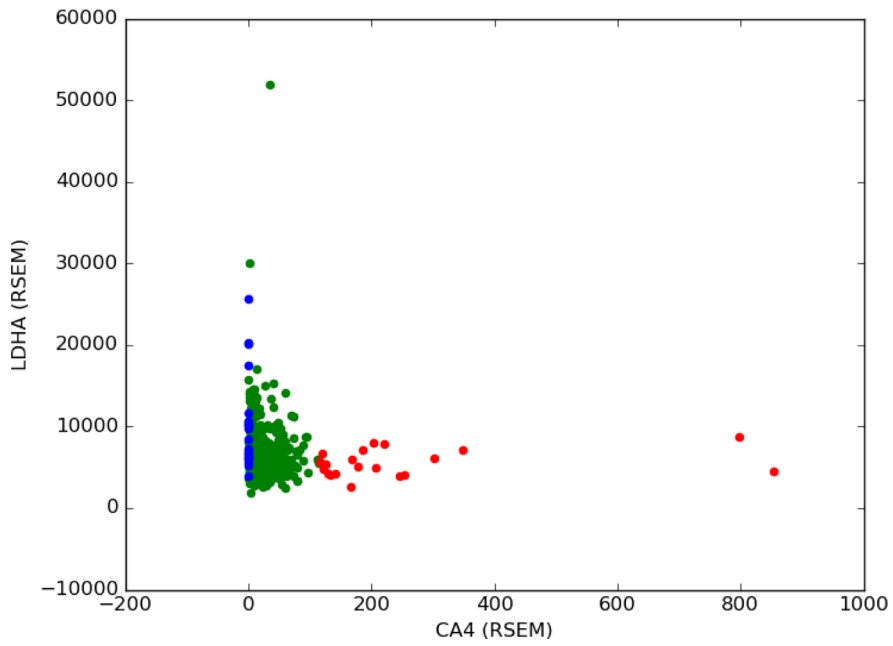
Supplementary Figure 23: Expression of the LDHA gene versus the expression of CA12 in lung tumor samples.



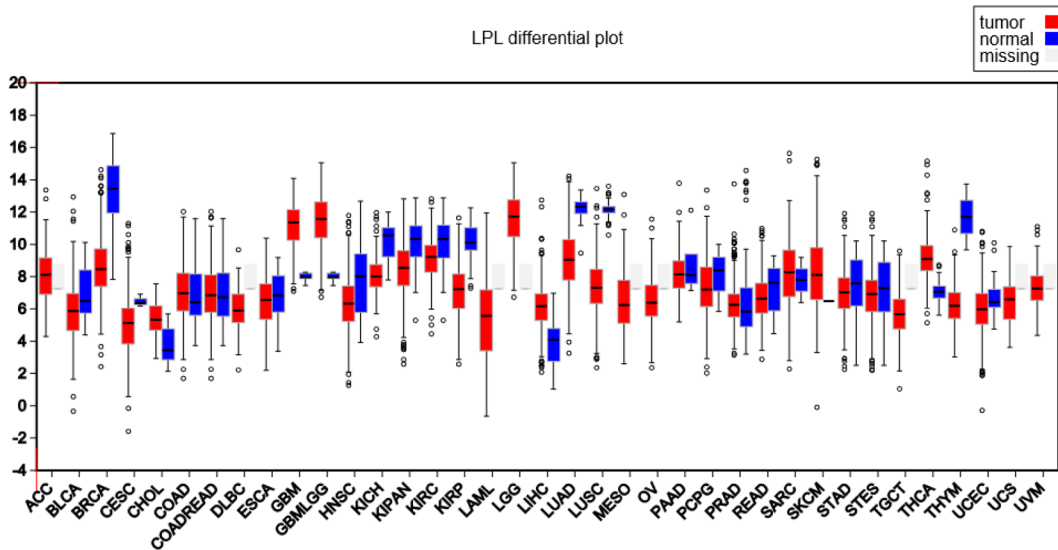
Supplementary Figure 24: Expression of the LDHA gene versus the expression of CA13 in lung tumor samples.



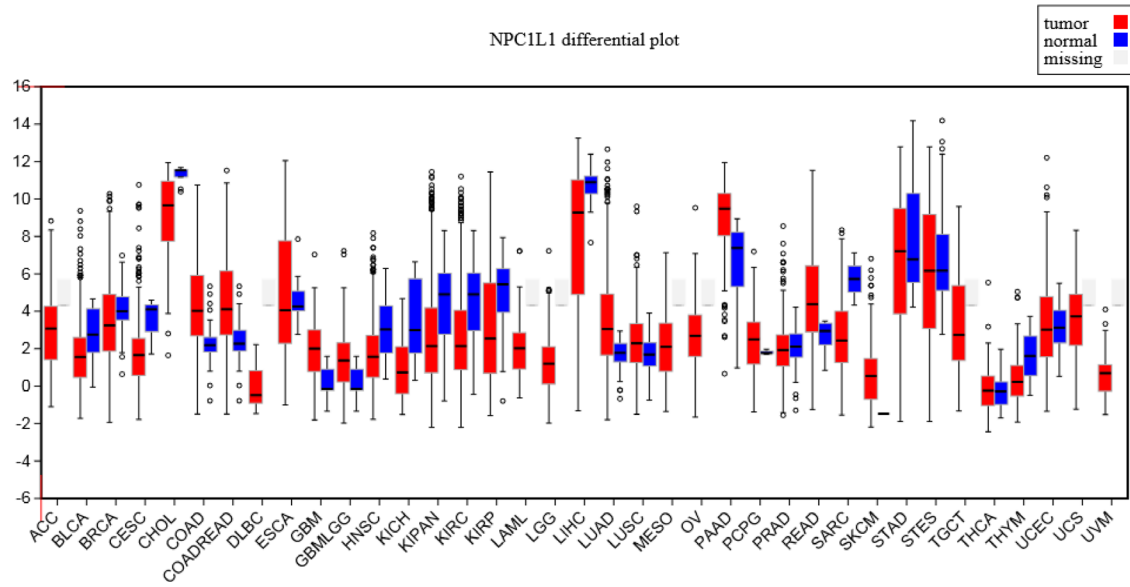
Supplementary Figure 25: Expression of the LDHA gene versus the expression of AQP5 in prostate tumor samples.



Supplementary Figure 26: Expression of the LDHA gene versus the expression of CA4 in breast tumor samples.



Supplementary Figure 27: Expression of the LPL gene in a panel of different cancer types and normal tissues.



Supplementary Figure 28: Expression of the NPC1L1 gene in a panel of different cancer types and normal tissues.