

Colorectal cancers utilize glutamine as an anaplerotic substrate of the TCA cycle in vivo

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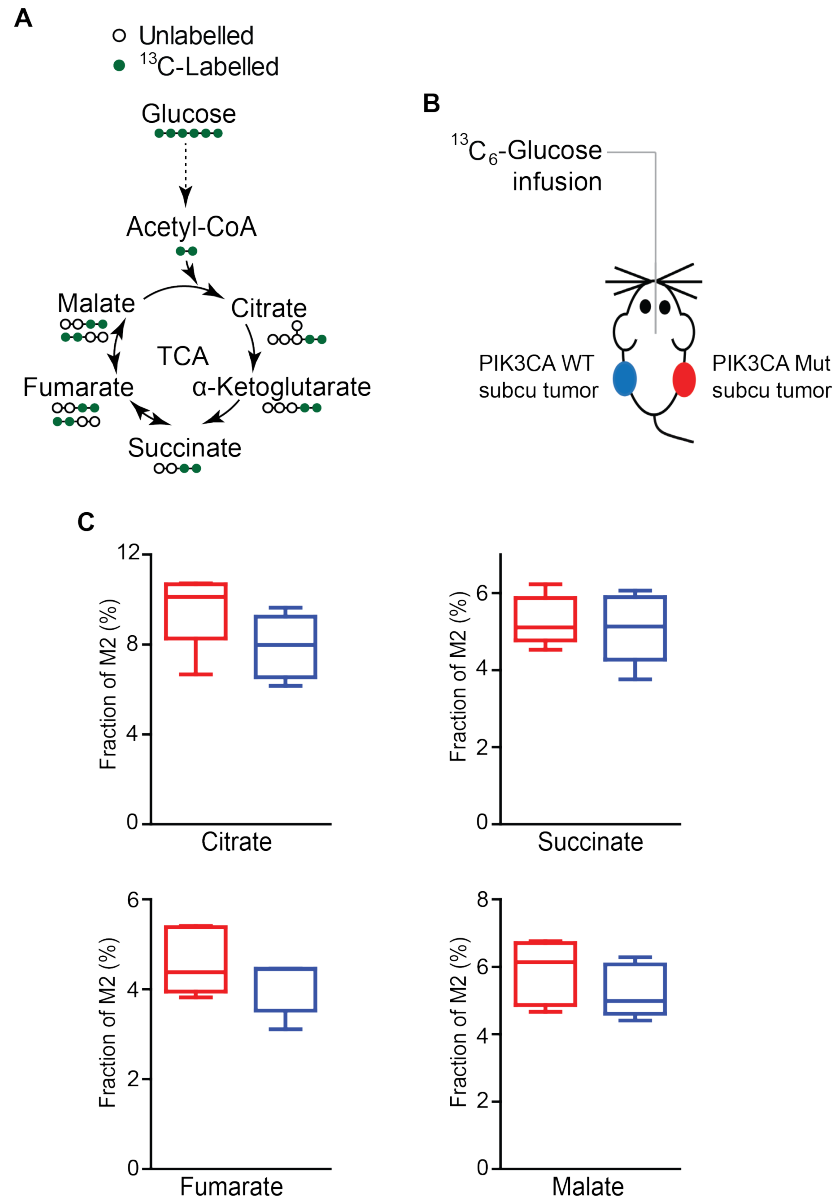
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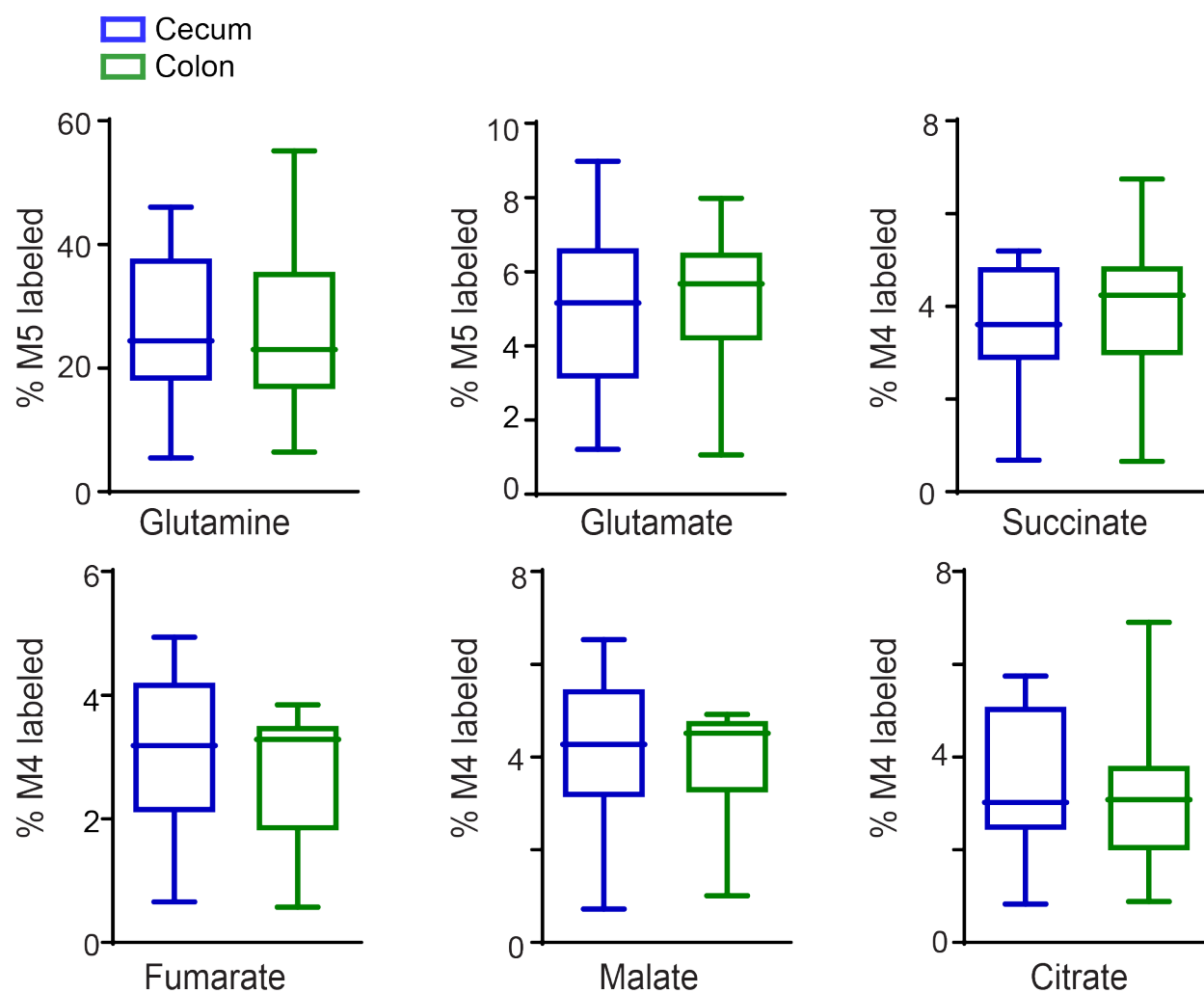
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Supplementary Figure 1 (A) Schematic diagram of glucose and its metabolites in the TCA cycle. **(B)** Schematic diagram of mice bearing subcutaneous (subcu) xenograft tumors infused with $^{13}\text{C}_6$ -glucose. Isogenic HCT116 PIK3CA WT only cells, in which the mutant allele is knocked out, were injected into left flanks of nude mice, whereas HTCT116 PIK3CA mutant only cells, in which the WT allele was knocked out, were injected into the right. Two weeks post-injection, mice ($n = 8$) bearing similar size tumors in the two flanks were surgically catheterized for $^{13}\text{C}_6$ -glucose infusion. **(C)** The indicated metabolite was measured by GC-MS and the percentage of the ^{13}C -labeled metabolite in the total pool was calculated.



Supplementary Figure 2. The M5 enrichment of glutamine and the M4 enrichments of metabolites directly derived from M5 glutamine in cecum and colon (8 mice) are shown.