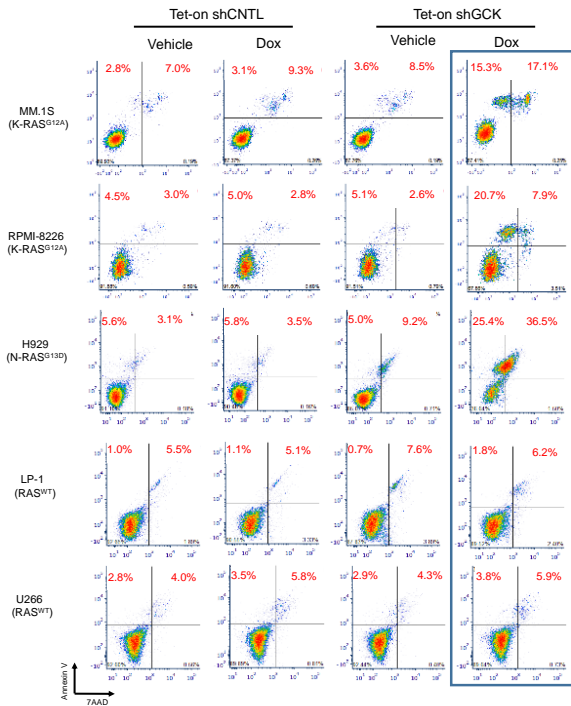
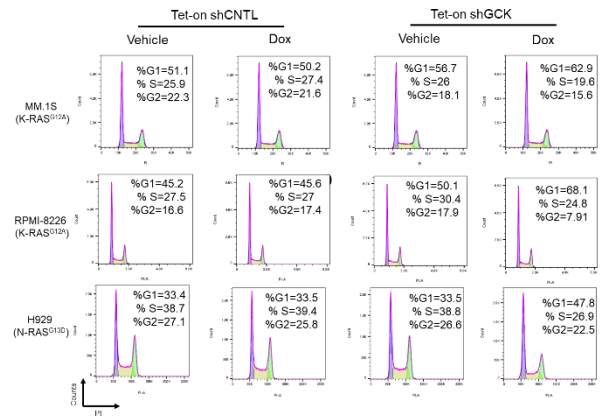


**Figure S1**

**A.**



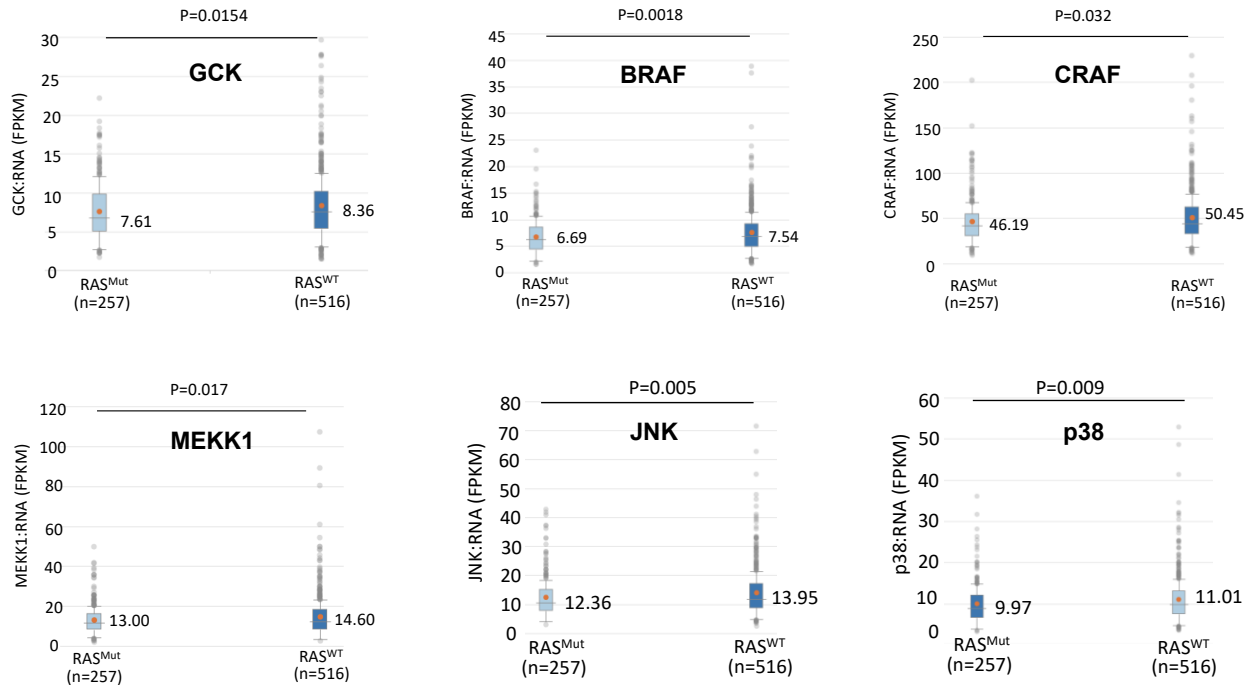
**B.**



**Figure S1. GCK is required for RAS<sup>Mut</sup> MM cells survival**

MM.1S (K-RAS<sup>G12A</sup>), RPMI-8266 (K-RAS<sup>G12A</sup>), H929 (N-RAS<sup>G13D</sup>), U266 (RAS<sup>WT</sup>) and LP-1 (RAS<sup>WT</sup>) cells were infected by pLKO-Tet-On scramble control (shCNTL) or shGCK lentivirus and selected by puromycin (3 ug/ul) for 1 week. Knockdown of GCK by doxycycline (Dox) treatment (400 ng/ml) for 3 days was confirmed by western blotting. Transduced and selected cells were cultured in the presence Dox (400 ng/ml) for 5 days. **(A)** Cells were stained with Annexin V and 7-AAD for apoptosis analysis **(B)**, or with propidium iodine (PI) for cell cycle analysis.

**Figure S2**



**Figure S2. The expression of GCK, BRAF, CRAF, MEKK1, JNK and p38 in MM patients.** Data from the CoMMpass database IA15 release. In the CoMMpass study, RNAseq on CD138-enriched bone marrow cells was performed using Illumina TruSeq RNA library kits. The expression of GCK, BRAF, CRAF, MEKK1, JNK and p38 using two sided-t-test comparing patients who had RAS mutation (RAS<sup>Mut</sup>) (n=257) and RAS wild type (RAS<sup>WT</sup>) (n=516).