

Figure S1 Expression levels of *RAC1* in different pathological stages for pan-cancer tumors. *, $P < 0.05$; **, $P < 0.01$. *RAC1*, Ras-related C3 botulinum toxin substrate 1; TPM, transcripts per million; ns, no significance; ACC, adrenocortical carcinoma; COAD, colon adenocarcinoma; HNSC, head and neck squamous cell carcinoma; KICH, kidney chromophobe; KIRC, kidney renal clear cell carcinoma; LIHC, liver hepatocellular carcinoma; LUAD, lung adenocarcinoma; MESO, mesothelioma; PAAD, pancreatic adenocarcinoma; UCEC, uterine corpus endometrial carcinoma; OV, ovarian serous cystadenocarcinoma.

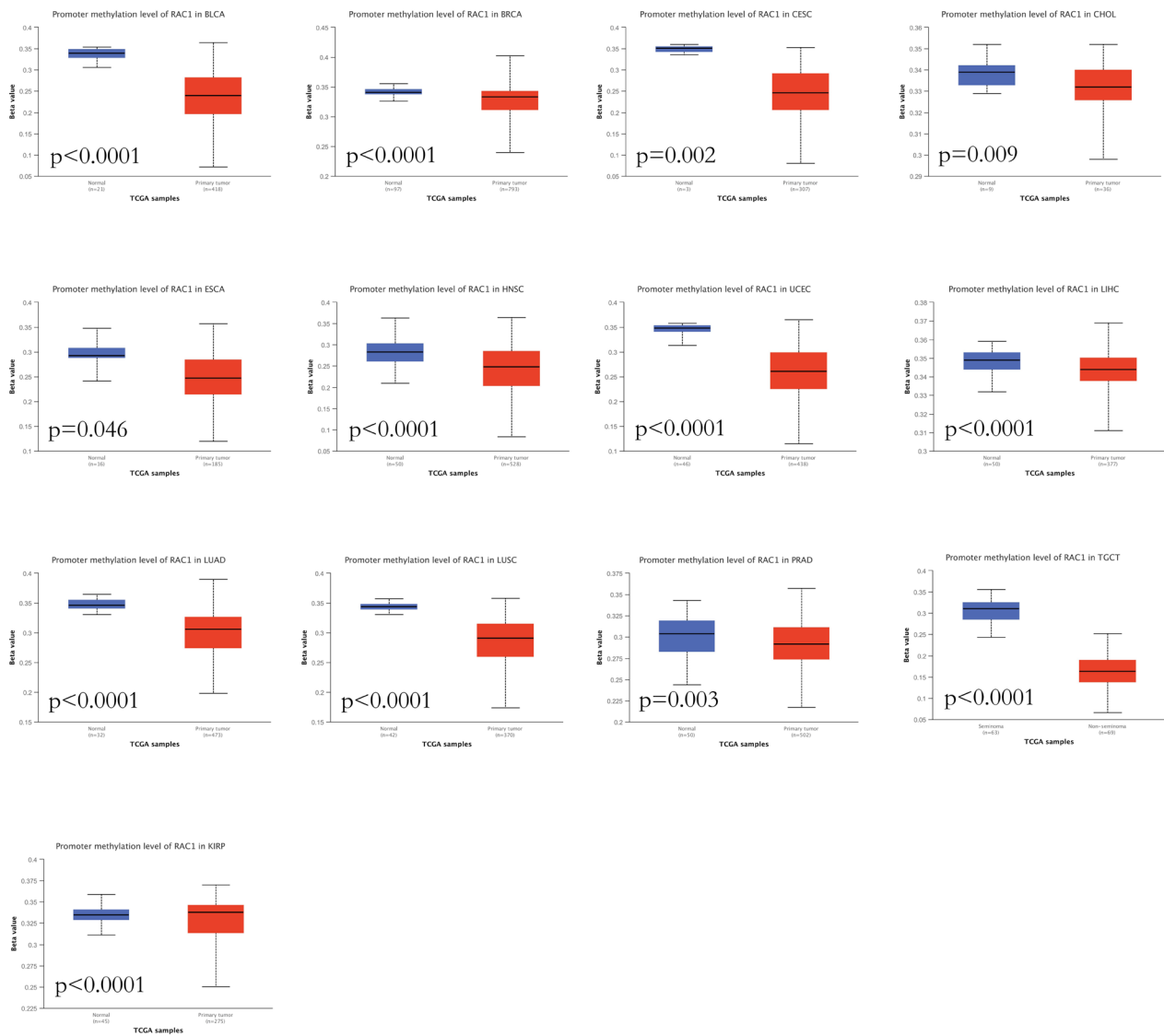


Figure S2 Promoter methylation of *RAC1* in tumor and normal tissues. *RAC1*, Ras-related C3 botulinum toxin substrate 1; TCGA, The Cancer Genome Atlas; BLCA, bladder urothelial carcinoma; BRCA, breast invasive carcinoma; CESC, cervical squamous cell carcinoma and endocervical adenocarcinoma; CHOL, cholangiocarcinoma; ESCA, esophageal carcinoma; HNSC, head and neck squamous cell carcinoma; UCEC, uterine corpus endometrial carcinoma; LIHC, liver hepatocellular carcinoma; LUAD, lung adenocarcinoma; LUSC, lung squamous cell carcinoma; PRAD, prostate adenocarcinoma; TGCT, testicular germ cell tumors; KIRP, kidney renal papillary cell carcinoma.

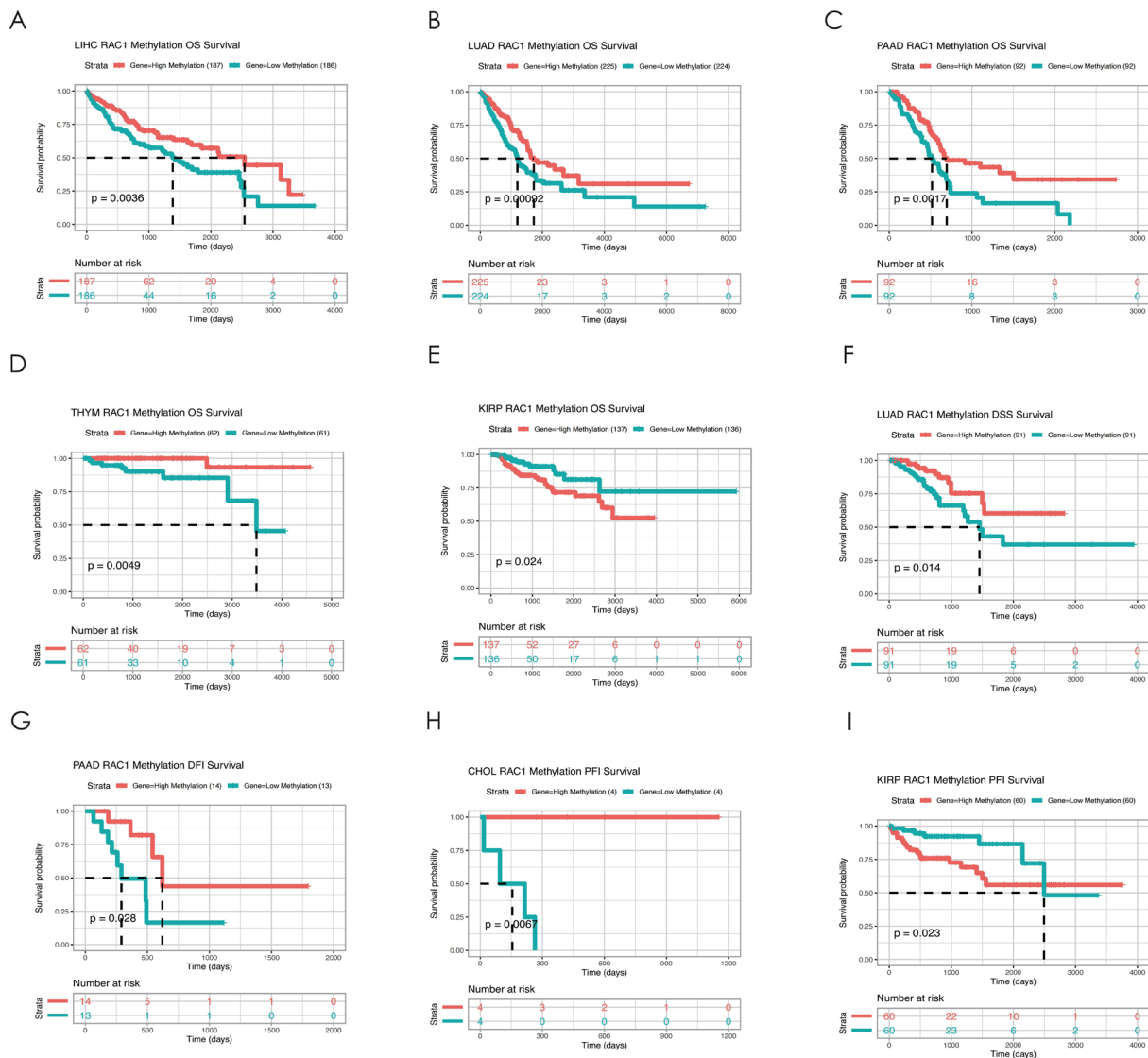


Figure S3 Correlation between *RAC1* promoter methylation and the survival of patients with tumor. Correlation between *RAC1* promoter methylation and OS (A-E), DSS (F), DFI (G), and PFI (H,I). LIHC, liver hepatocellular carcinoma; *RAC1*, Ras-related C3 botulinum toxin substrate 1; OS, overall survival; LUAD, lung adenocarcinoma; PAAD, pancreatic adenocarcinoma; THYM, thymoma; KIRP, kidney renal papillary cell carcinoma; DSS, disease-specific survival; DFI, disease-free interval; CHOL, cholangiocarcinoma; PFI, progression-free interval.

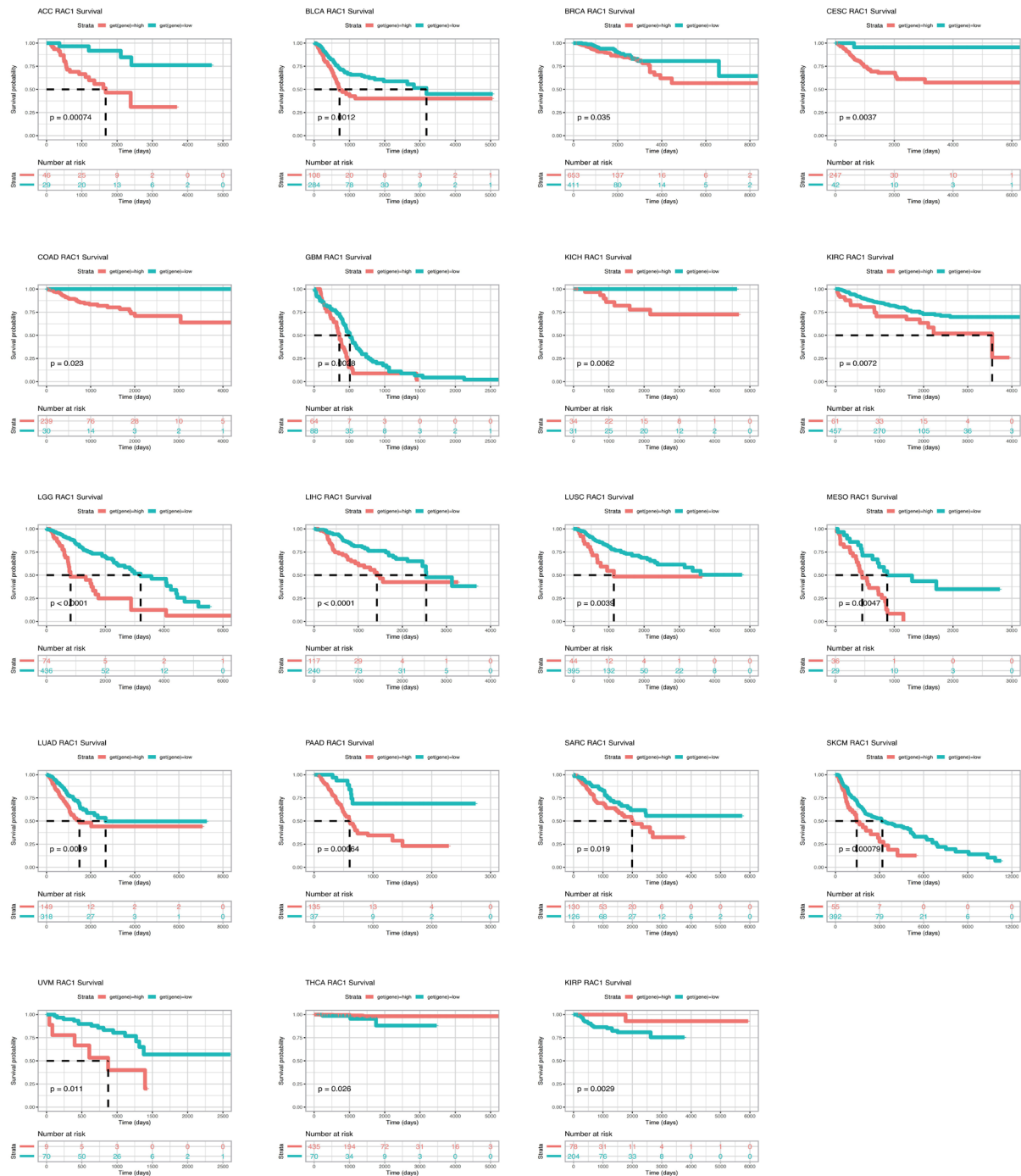


Figure S4 Correlation between the *RAC1* expression and DSS. *RAC1*, Ras-related C3 botulinum toxin substrate 1; DSS, disease-specific survival; ACC, adrenocortical carcinoma; BLCA, bladder urothelial carcinoma; BRCA, breast invasive carcinoma; CESC, cervical squamous cell carcinoma and endocervical adenocarcinoma; COAD, colon adenocarcinoma; GBM, glioblastoma multiforme; KICH, kidney chromophobe; KIRC, kidney renal clear cell carcinoma; LGG, lower grade glioma; LIHC, liver hepatocellular carcinoma; LUSC, lung squamous cell carcinoma; MESO, mesothelioma; LUAD, lung adenocarcinoma; PAAD, pancreatic adenocarcinoma; SARC, sarcoma; SKCM, skin cutaneous melanoma; UVM, uveal melanoma; THCA, thyroid carcinoma; KIRP, kidney renal papillary cell carcinoma.

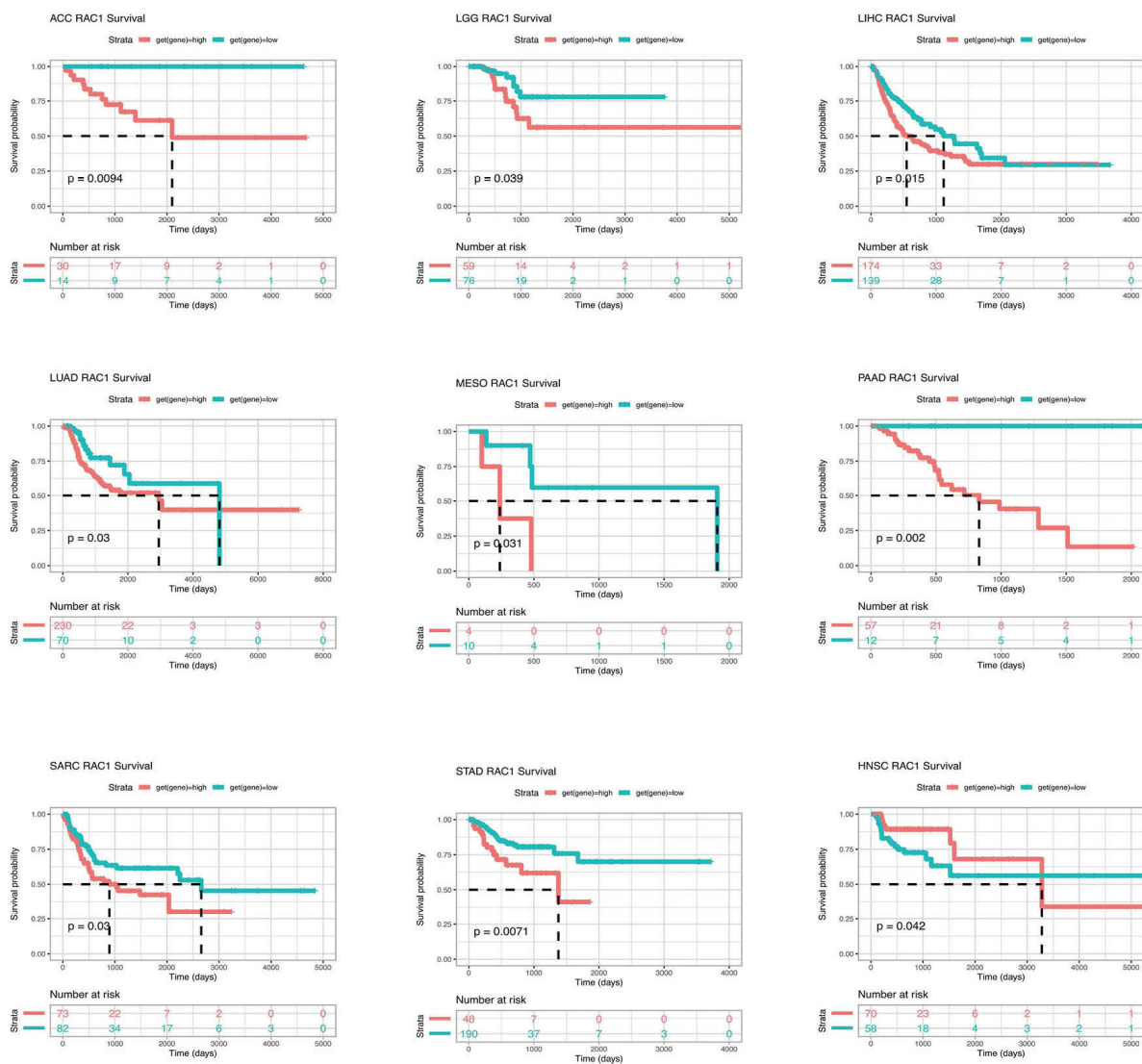


Figure S5 Correlation between *RAC1* expression and DFI. ACC, adrenocortical carcinoma; *RAC1*, Ras-related C3 botulinum toxin substrate 1; LGG, lower grade glioma; LIHC, liver hepatocellular carcinoma; LUAD, lung adenocarcinoma; MESO, mesothelioma; PAAD, pancreatic adenocarcinoma; SARC, sarcoma; STAD, stomach adenocarcinoma; HNSC, head and neck squamous cell carcinoma; DFI, disease-free interval.

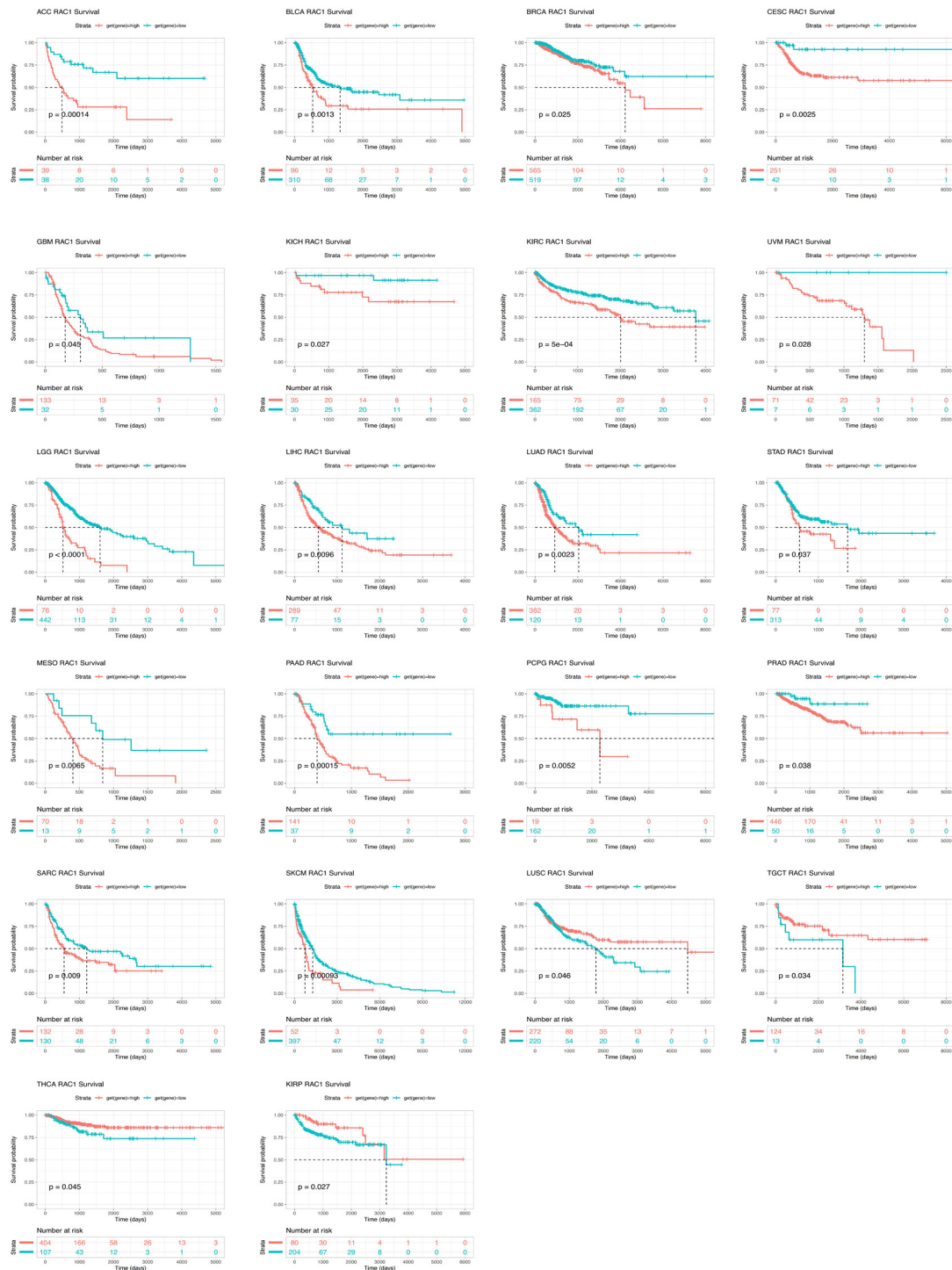


Figure S6 Correlation between *RAC1* expression and PFI. *RAC1*, Ras-related C3 botulinum toxin substrate 1; PFI, progression-free interval; ACC, adrenocortical carcinoma; BLCA, bladder urothelial carcinoma; BRCA, breast invasive carcinoma; CESC, cervical squamous cell carcinoma and endocervical adenocarcinoma; GBM, glioblastoma multiforme; KICH, kidney chromophobe; KIRC, kidney renal clear cell carcinoma; UVM, uveal melanoma; LGG, lower grade glioma; LIHC, liver hepatocellular carcinoma; LUAD, lung adenocarcinoma; STAD, stomach adenocarcinoma; MESO, mesothelioma; PAAD, pancreatic adenocarcinoma; PCPG, pheochromocytoma and paraganglioma; PRAD, prostate adenocarcinoma; SARC, sarcoma; SKCM, skin cutaneous melanoma; LUSC, lung squamous cell carcinoma; TGCT, testicular germ cell tumors; THCA, thyroid carcinoma; KIRP, kidney renal papillary cell carcinoma.