

## Supplementary Materials:

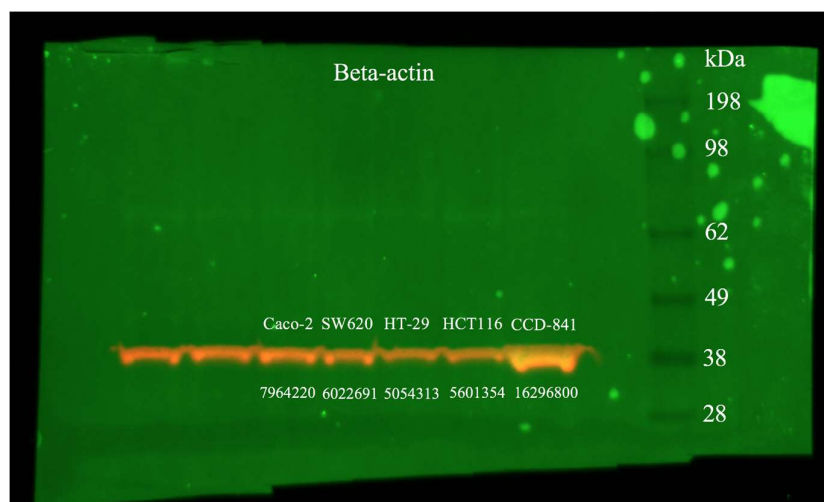
# Protein Arginine Methyltransferase 5 as a Therapeutic Target for *KRAS* Mutated Colorectal Cancer

David Shifteh, Tzuriel Sapir, Moshe Pahmer, Adam Haimowitz, Sanjay Goel and Radhashree Maitra

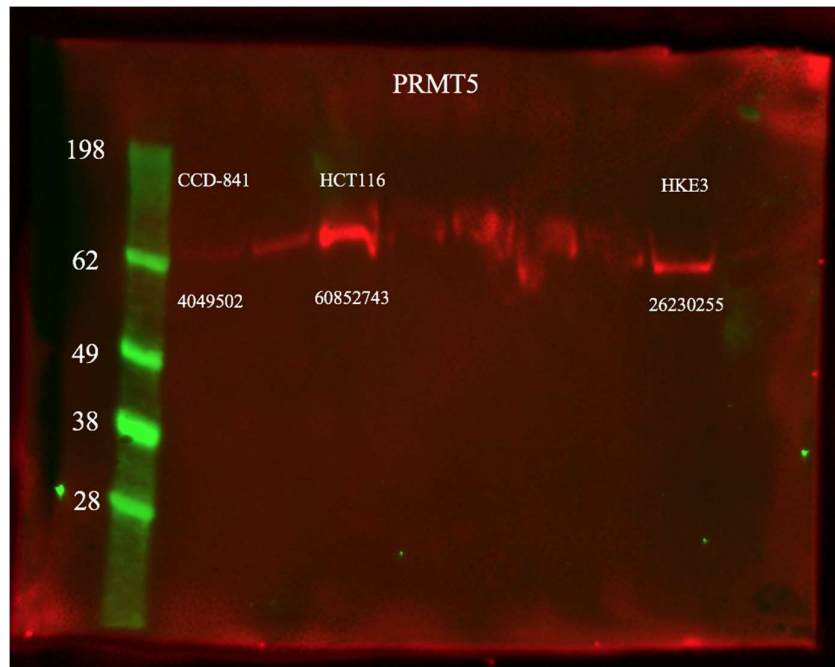
(a)



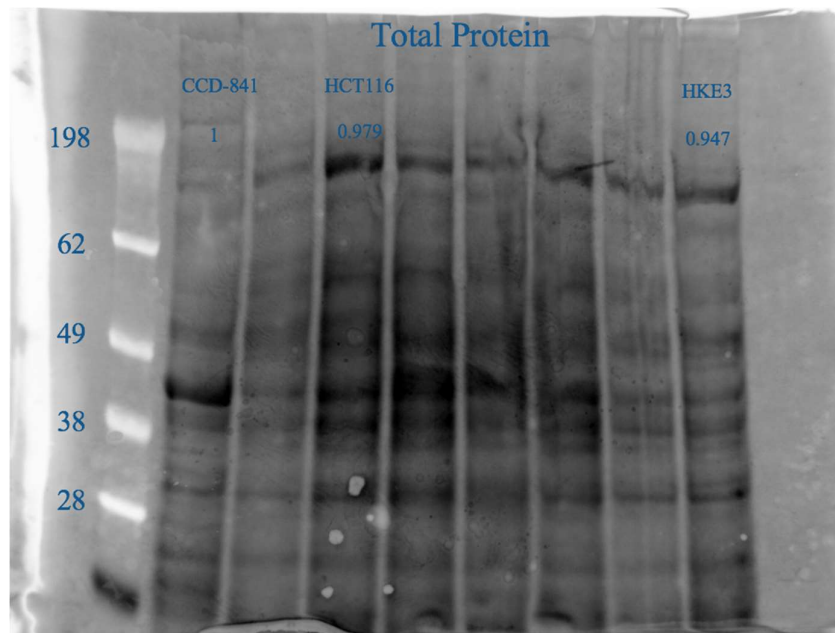
(b)



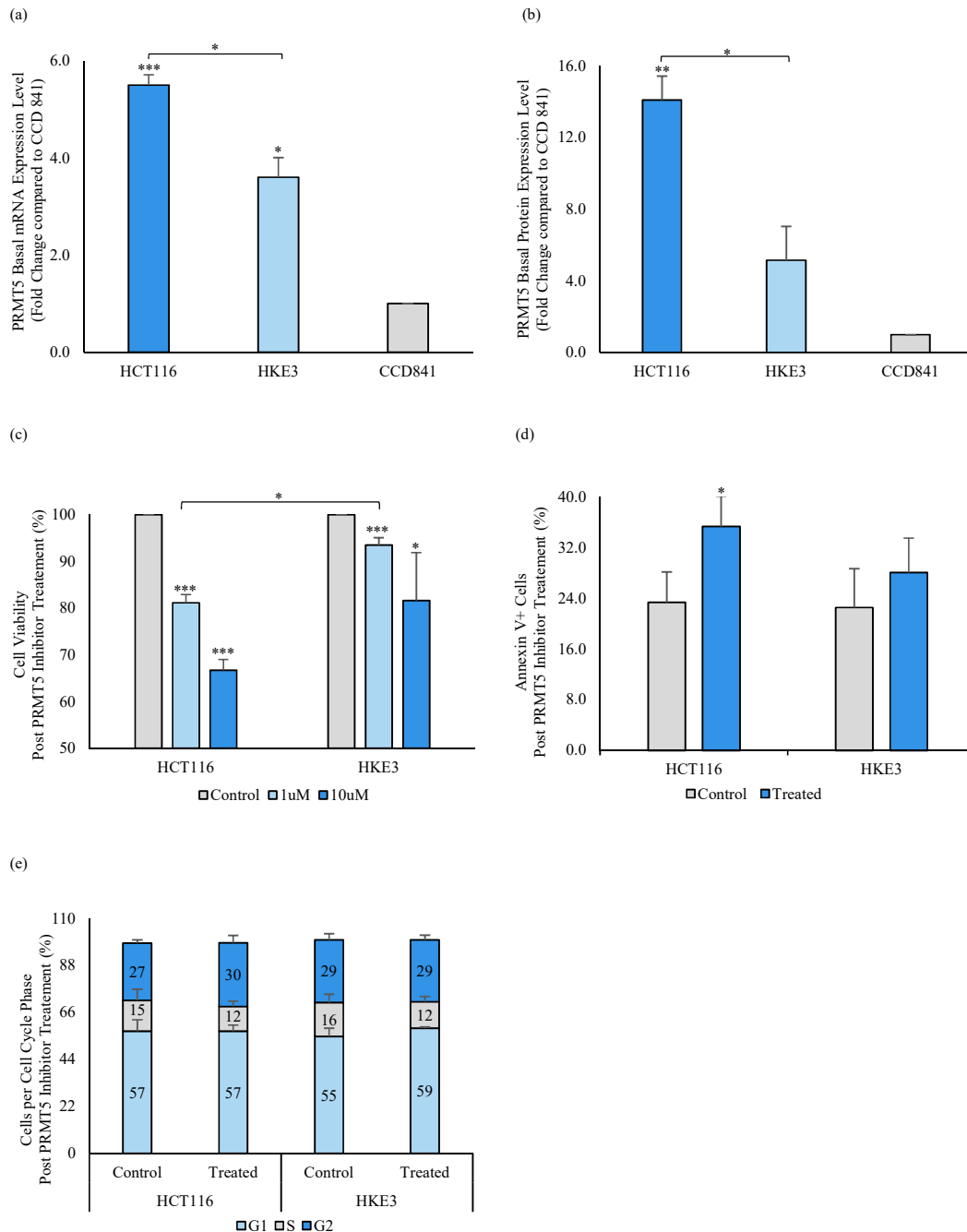
(c)



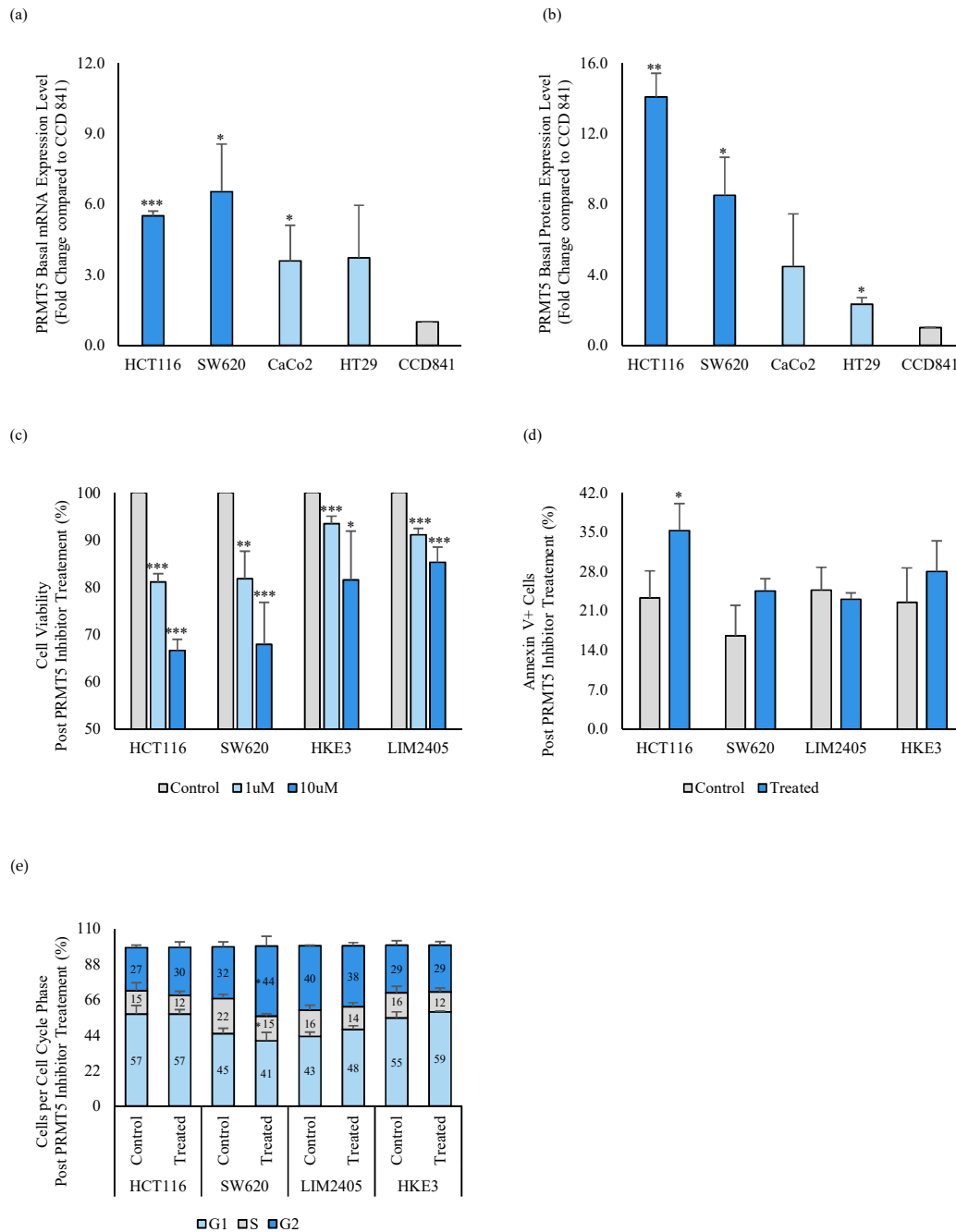
(d)



**Figure S1.** Uncropped western blot membranes. (a) Uncropped PRMT5 probed western blot membrane from Figure 3; (b) Uncropped beta-actin probed western blot membrane from Figure 3; (c) Uncropped PRMT5 probed western blot membrane from Figure S2; (d) Uncropped total protein western blot membrane from Figure S2.



**Figure S2.** Experimental data for isogenic cell lines HCT116 (*KRAS* mutant) and HKE3 (*KRAS* WT). **(a)** Quantified qPCR assay results showing basal PRMT5 expression of HCT116 and HKE3 cell lines at the transcriptional level; **(b)** Quantified western blot assay results displaying the basal PRMT5 expression of HCT116 and HKE3 cell lines at the translational level; **(c)** Quantified cell viability assay results showing the cell viability of HCT116 and HKE3 cell lines post 60 hours of 1µM and 10µM PRMT5 inhibiting treatment; **(d)** Quantified Annexin V assay results displaying the percent of apoptotic cells post 60 h of 10 µM PRMT5 inhibiting treatment in HCT116 and HKE3 cell lines; **(e)** Quantified cell cycle assay results showing the percent of cells per cell cycle phase post 60 h of 10 µM PRMT5 inhibiting treatment in HCT116 and HKE3 cell lines. Data are expressed as means + SD from two to four independent experiments using two CRC cell lines, as well as one normal colon cell line.



**Figure S3.** Experimental data for the individual cell lines used in Figures 2–6. (a) Quantified qPCR assay results showing basal PRMT5 expression at the transcriptional level in CRC cell lines; (b) Quantified western blot assay results displaying the basal PRMT5 expression at the translational level in CRC cell lines; (c) Quantified cell viability assay results showing the cell viability of CRC cell lines post 60 h of 1  $\mu$ M and 10  $\mu$ M PRMT5 inhibiting treatment; (d) Quantified Annexin V assay results displaying the percent of apoptotic cells post 60 h of 10  $\mu$ M PRMT5 inhibiting treatment in CRC cell lines; (e) Quantified cell cycle assay results showing the percent of cells per cell cycle phase post 60 hours of 10 $\mu$ M PRMT5 inhibiting treatment in CRC cell lines. Data are expressed as means + SD from two to four independent experiments using four CRC cell lines (2 *KRAS* mutant, 2 *KRAS* WT), as well as one normal colon cell line.

**Table S1.** Percent inhibition of CRC cell lines after treatment with several concentrations of PRMT5 inhibitor.

| PRMT5 Inhibitor Concentration | 1 nM | 10 nM | 100 nM | 1 $\mu$ M | 10 $\mu$ M |
|-------------------------------|------|-------|--------|-----------|------------|
| LIM2405 Percent Inhibition    | -5   | -3    | 0      | 11        | 24         |
| SW620 Percent Inhibition      | 1    | 2     | 5      | 14        | 30         |