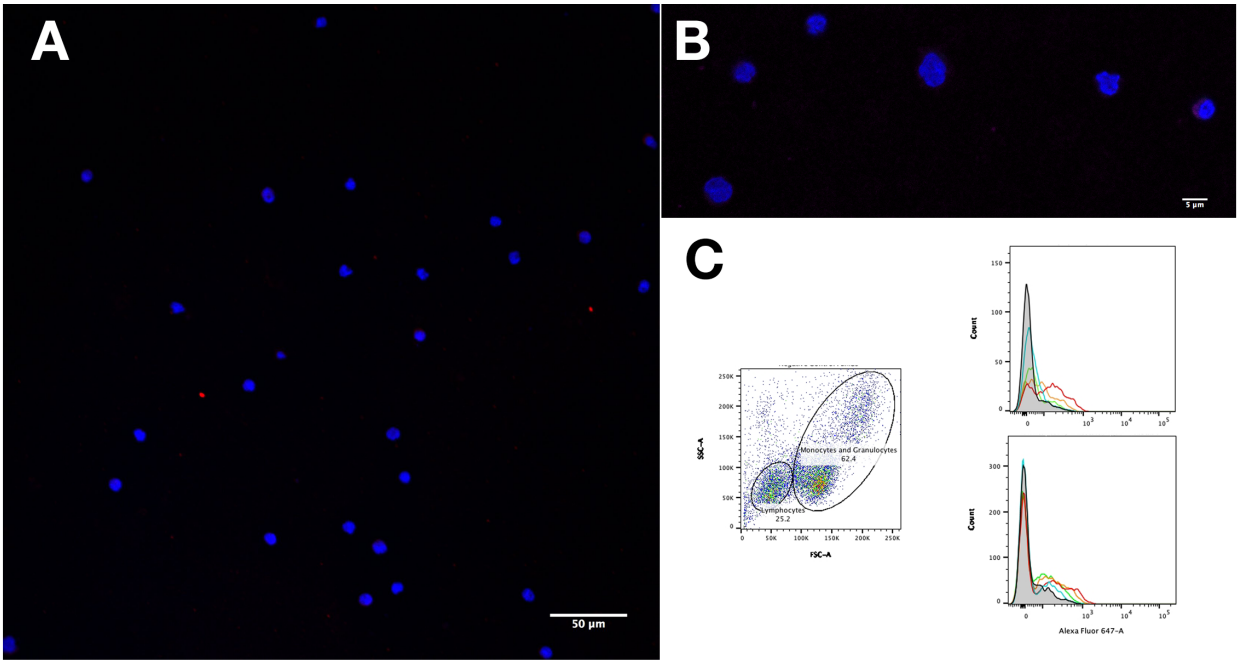
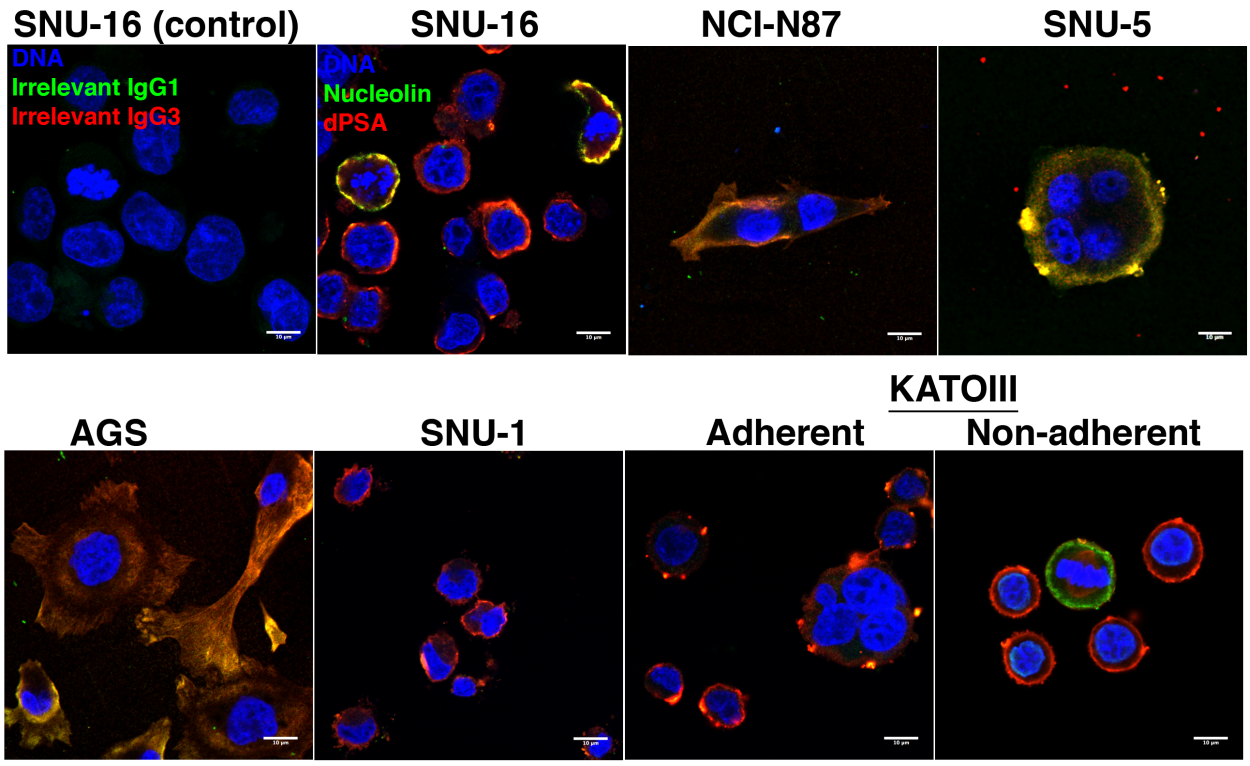
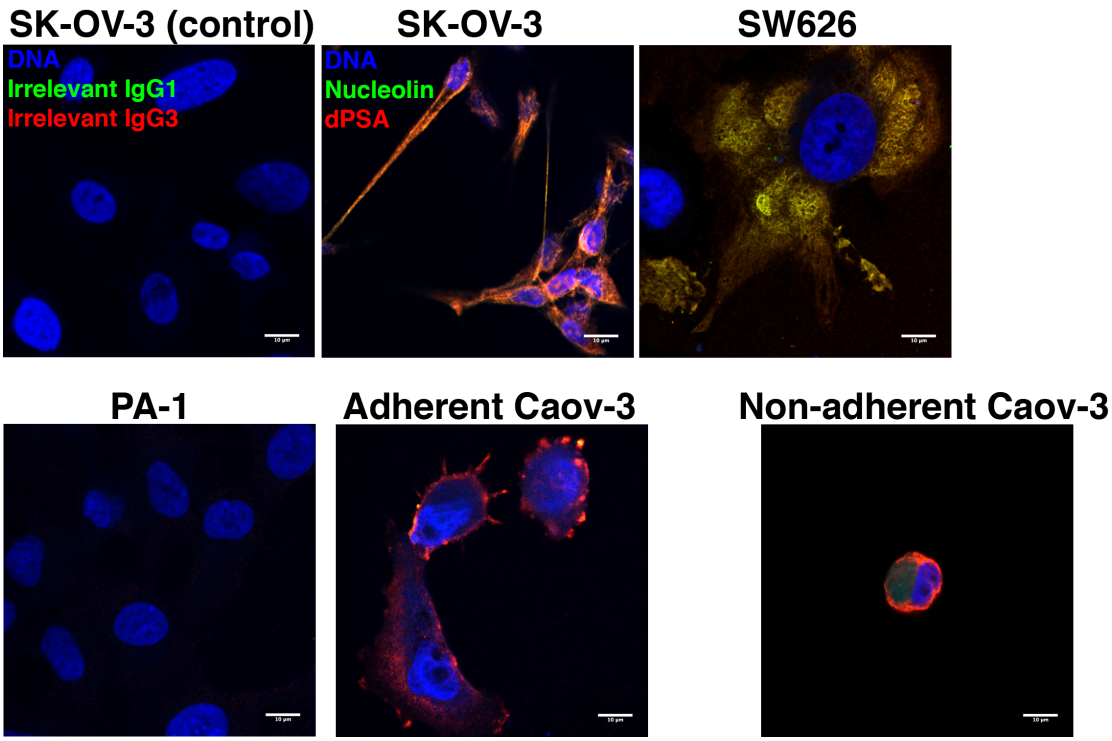
Additional File 2: Supplementary Figs. S5–S8.



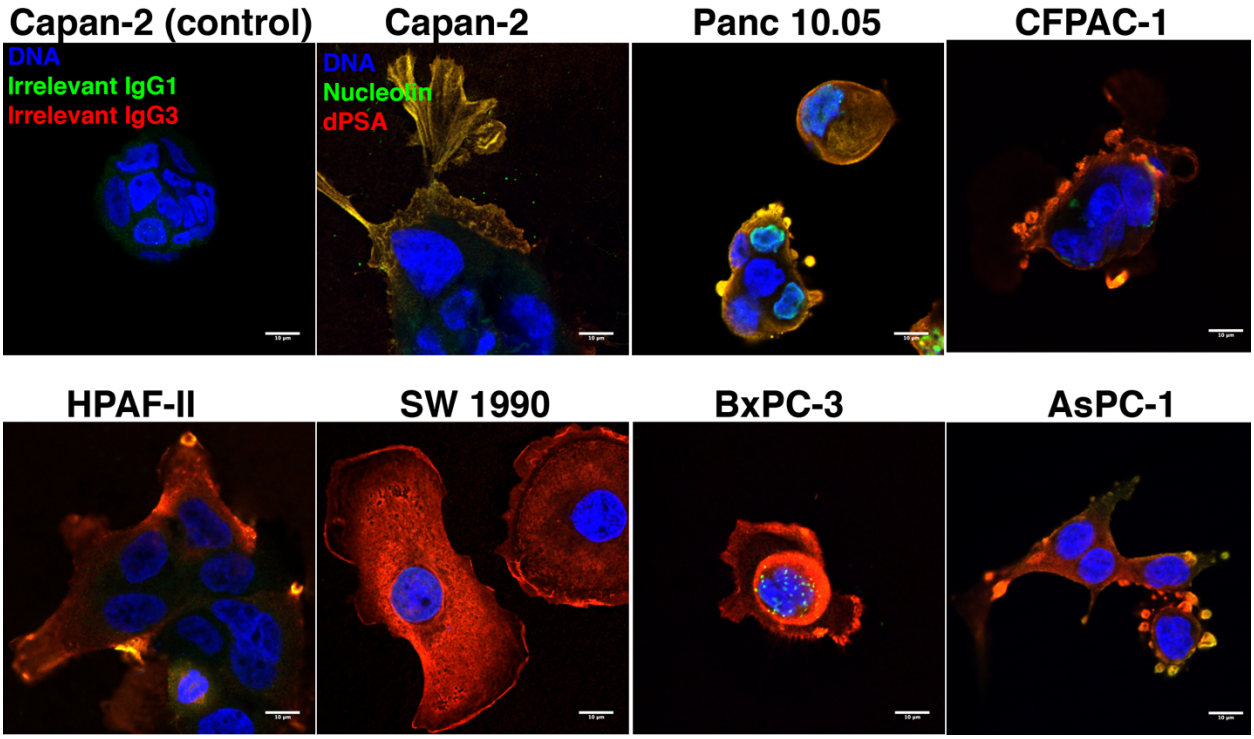
Supplementary Fig. S5. Normal human PBMCs do not have cell surface dPSA. The possible presence of dPSA was identified on the surface of PBMCs by fluorescently labeling with anti-dPSA antibody SEAM 3 and AlexaFluor 594 (red fluorescence) -conjugated anti-mouse subtype-specific antibody using confocal laser scanning microscopy and by flow cytometry with SEAM 3 and AlexaFluor 647-conjugated anti-mouse subtype-specific antibody. A, 20x magnification. B, 63x magnification. Blue fluorescence is DAPI DNA staining. Scale bars, 50 µm (A) or 5 µm (B). C, SEAM 3 binding by flow cytometry was tested at 10 µg/mL (red line), 3 µg/mL (orange line), and 1 µg/mL (green line). Controls included secondary antibody alone (gray fill) and irrelevant mouse IgG2b mAb from BioXCell (cyan line).



Supplementary Fig. S6. Primary and metastatic gastric cancer cell lines express cell surface dPSA and nucleolin. dPSA and nucleolin were identified on the surface of cancer cells SNU-16, NCI-N87, SNU-5, and KATOIII from metastatic and AGS and SNU-1 from primary gastric tumors with anti-dPSA mAb SEAM 2 or anti-nucleolin mAb MS-3 and detected by fluorescently labeling with AlexaFluor 594 (red fluorescence) or AlexaFluor 488 (green fluorescence)-conjugated anti-mouse subtype-specific antibodies, respectively, using confocal laser scanning microscopy. A representative example of a cell line (SNU-16) treated with irrelevant mouse IgG1 and IgG3 mAbs and AlexaFluor-conjugated secondary antibodies as a negative control is also shown. Blue fluorescence is DAPI DNA staining. Also shown is reactivity of anti-dPSA and -nucleolin with non-adherent KATOIII cells treated with Triton X-100 to show the presence of dPSA-nucleolin on microtubules of a dividing cell in anaphase I and the movement of nuclear nucleolin to the cell membrane upon dissolution of the nuclear membrane. Scale bars, 10 μm.



Supplementary Fig. S7. Primary and metastatic ovarian cancer cell lines express cell surface dPSA and nucleolin. dPSA and nucleolin were identified on the surface of cancer cells SK-OV-3 and PA-1 from metastatic and SW626 and Cavo-3 (adherent and non-adherent) from primary ovarian tumors with anti-dPSA mAb SEAM 2 or anti-nucleolin mAb MS-3 and detected by fluorescently labeling with AlexaFluor 594 (red fluorescence) or AlexaFluor 488 (green fluorescence)-conjugated anti-mouse subtype-specific antibodies, respectively, using confocal laser scanning microscopy. A representative example of a cell line (SK-OV-3) treated with irrelevant mouse IgG1 and IgG3 mAbs and AlexaFluor-conjugated secondary antibodies as a negative control is also shown. . In addition, the ovarian teratocarinoma cell line PA-1 was negative for both dPSA and nucleolin. Blue fluorescence is DAPI DNA staining. Scale bars, 10 μm.



Supplementary Fig. S8. Primary and metastatic pancreatic cancer cell lines express cell surface dPSA and nucleolin. dPSA and nucleolin were identified on the surface of cancer cells CFPAC-1, HPAF-II, SW 1990, and AsPC-1 from metastatic and Capan-2, Panc 10.5, and BxPC-3 from primary pancreatic tumors with anti-dPSA mAb SEAM 2 or anti-nucleolin mAb MS-3 and detected by fluorescently labeling with AlexaFluor 594 (red fluorescence) or AlexaFluor 488 (green fluorescence)-conjugated anti-mouse subtype-specific antibodies, respectively, using confocal laser scanning microscopy. A representative example of a cell line (Capan-2) treated with irrelevant mouse IgG1 and IgG3 mAbs and AlexaFluor-conjugated secondary antibodies as a negative control is also shown. Blue fluorescence is DAPI DNA staining. Scale bars, 10 µm.