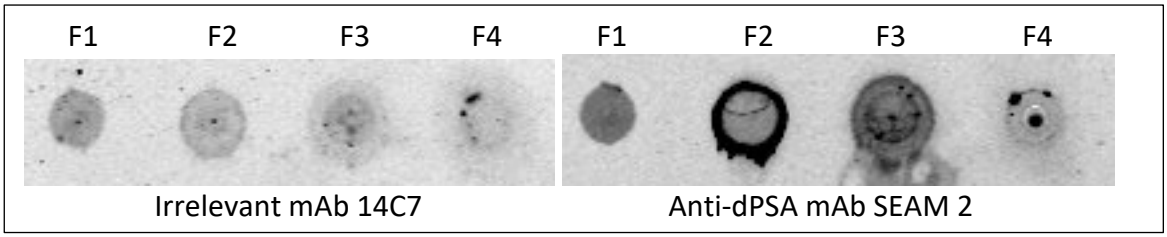
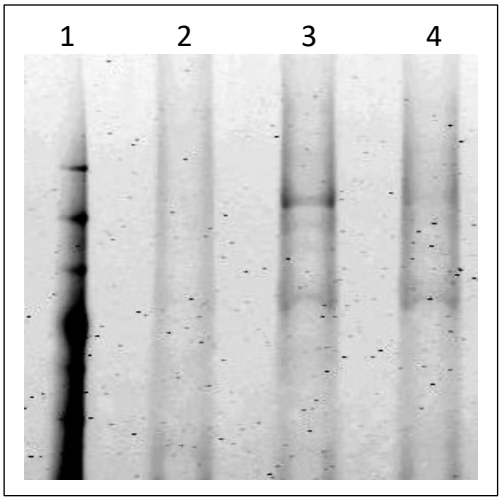
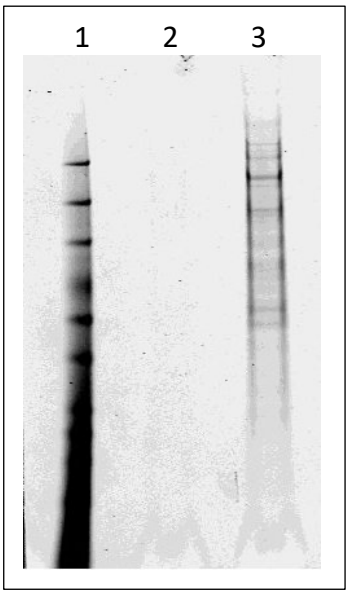
Additional file 1: Supplementary Figs. S1-S4



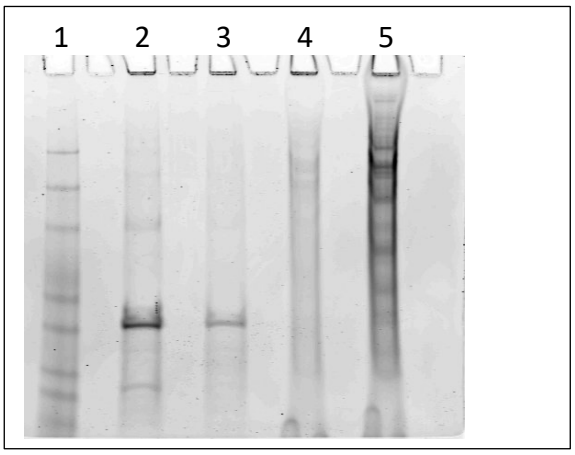
Supplementary Fig. S1. Immunodot blot of SK-MEL-28 cell differential detergent extraction fractions. Replicate portions of each detergent extract fraction from SK-MEL-28 cells prepared as described in Methods was spotted onto a PVDF membrane (Millipore) mounted on a dot blot apparatus (Topac). After blocking with 2% non-fat dry milk in DPBS blocking buffer, the section of the membrane was incubated with the indicated mAb for 1 hr at ambient temperature in the same blocking buffer and washed with DPBS containing 0.1% Tween 20 three times for 5 minutes. mAbs binding to the membrane were detected with IRDye®800CW Donkey anti-Mouse IgG (H+L) secondary antibody (LiCOR) using the same method as the primary mAb and images were recorded on an Odyssey® Fc Imaging System (LiCOR).



Supplementary Fig. S2. Antigens immunoprecipitated from SK-MEL-28 melanoma cells differential detergent extraction fraction 2. Immunoprecipitation was performed as described in the Methods using an irrelevant IgG3 mAb 14C7 (lane 2), anti-dPSA mAb SEAM 2 (lane 3) and anti-PSA mAb (SEAM 12). Proteins in the samples were resolved on 4–12% gradient SDS-PAGE gels (NuPAGE, Thermo Fisher Scientific). The gels were stained with SimplyBlue™ Coomassie stain (Thermo Fisher Scientific). Individual bands were excised from the gel for LC/MS/MS analysis as described in the Methods. Protein molecular mass standards (Benchmark®, Invitrogen) are in lane 1.



Supplementary Fig. S3. Antigens immunoprecipitated from Kelly neuroblastoma cells differential detergent extraction fraction 2. Immunoprecipitation was performed as described in the Methods from Kelly neuroblastoma cell differential detergent fraction 2 using an irrelevant IgG3 mAb 14C7 (lane 2), anti-dPSA mAb SEAM 2 (lane 3). Proteins in the samples were resolved on 4–12% gradient SDS-PAGE gels (NuPAGE, Thermo Fisher Scientific). The gels were stained with SimplyBlue™ Coomassie stain (Thermo Fisher Scientific). Individual bands were excised from the gel for LC/MS/MS analysis as described in the Methods. Protein molecular mass standards (Benchmark®, Invitrogen) are in lane 1.



Supplementary Fig. S4. Antigens immunoprecipitated from PBMCs and SNU-1 gastric cancer cells differential detergent extraction fraction 2. Immunoprecipitation was performed as described in the Methods from PBMCs (lanes 2 and 4) or SNU-1 cells (lanes 4 and 5) using an irrelevant protein, Neisserial Factor H binding protein (lanes 2 and 3), or anti-dPSA mAb SEAM 2 (lanes 4 and 5). Proteins in the samples were resolved on 4–12% gradient SDS-PAGE gels (NuPAGE, Thermo Fisher Scientific). The gels were stained with SimplyBlue™ Coomassie stain (Thermo Fisher Scientific). Individual bands were excised from the gel for LC/MS/MS analysis as described in the Methods. Protein molecular mass standards (Benchmark®, Invitrogen) are in lane 1.