Supplementary Figure Legends

Supplementary Figure 1

Validation of ST6Gal-I antibody. (A) Two cell lines, SW48 colon cancer cells and OV4 ovarian cancer cells, both lacking endogenous ST6Gal-I expression, were forced to express ST6Gal-I by lentiviral transduction (note that SW48 and SW948 are two distinct cell lines). Lysates from these lines were immunoblotted for ST6Gal-I, which showed antibody binding to a 50kD protein present only in the ST6Gal-I expressing cells (Par = parental; EV = empty vector; ST6 = cells with forced ST6Gal-I expression). (B) Par and ST6 OV4 cells were immunofluorescently stained for ST6Gal-I (green), which revealed positive staining only in ST6 cells. Nuclei were stained with Hoescht (blue). (C) Formaldehyde-fixed OV4 cells were stained by immunohistochemistry (image is in black and white). (D) OV4 cells were detached from culture flasks, centrifuged, and cell pellets were embedded in paraffin and sectioned. Cell pellet sections were subjected to antigen retrieval and immunohistochemical staining using the same protocol employed for immunohistochemistry of human cancer tissue sections.

Supplementary Figure 2

Negative controls for ST6Gal-I staining of tissue sections. (A) Frozen slides containing colon metastasis to liver were subjected to incubation with ST6Gal-I antibody or isotype control IgG (Sigma). Signal was developed with NovaRed, then counter-stained with hematoxylin to detect non-specific labeling. There was no detectable non-specific labeling in the isotype IgG control. (B) Paraffin-embedded pair-matched colon tumor and uninvolved colon were exposed to secondary antibody alone (no primary antibody). There was no detectable staining in either section.

Supplementary Table 1

Patient demographics and pathological diagnosis for colon tumor samples.