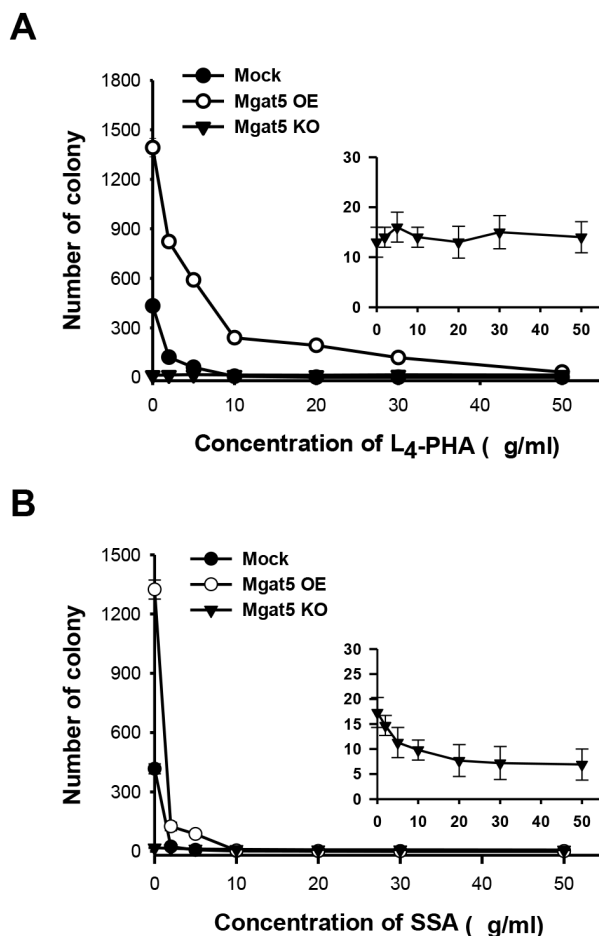


Lectin from *Sambucus sieboldiana* abrogates the anoikis resistance of colon cancer cells conferred by N-acetylglucosaminyltransferase V during hematogenous metastasis

SUPPLEMENTARY MATERIALS

Symbol	Structure	Symbol	Structure	Symbol	Structure	Symbol	Structure
3_3_0_0		5_4_0_1		6_5_0_2		7_6_0_3	
3_3_1_0		5_4_0_2		6_5_0_3		7_6_0_4	
3_4_0_0		5_4_1_0		6_5_1_0		7_6_1_0	
3_4_1_0		5_4_1_1		6_5_1_1		7_6_1_1	
3_5_0_0		5_4_1_2		6_5_1_2		7_6_1_2	
3_5_1_0		5_5_0_0		6_5_1_3		7_6_1_3	
3_6_0_0		5_5_0_1		6_6_0_0		7_6_1_4	
3_6_1_0		5_5_0_2		6_6_0_1		8_7_0_0	
4_4_0_0		5_5_1_1		6_6_0_2		8_7_0_1	
4_4_0_1		5_5_1_2		6_6_0_3		8_7_0_2	
4_4_1_0		6_4_0_0		6_6_1_0		8_7_0_3	
4_4_1_1		6_4_0_1		6_6_1_1		8_7_0_4	
4_5_0_0		6_4_0_2		6_6_1_2		8_7_1_0	
4_5_0_1		6_4_1_1		6_6_1_3		8_7_1_1	
4_5_1_0		6_4_1_2		7_6_0_0		8_7_1_2	
4_5_1_1		6_5_0_0		7_6_0_1		8_7_1_3	
5_4_0_0		6_5_0_1		7_6_0_2		8_7_1_4	

Supplementary Figure 1: Identified N-glycan structures with symbols. ■, N-acetylglucosamine; ●, mannose; ▼, fucose; ●, galactose; ◆, N-acetylneuraminic acid.



Supplementary Figure 2: Dependence of anoikis sensitivity on the concentration of L₄-PHA and SSA. HT-29 mock, Mgat5 overexpression transfectant (OE), and Mgat5 knock-out (KO) cells were exposed to anoikis stress for 48 hours in the presence of indicated concentration of L₄-PHA **A.** and SSA **B.** Cells were allowed to grow on culture plates for 3 days and the number of colony was counted on a microscope (X100). The average number of colony was compared between the HT-29 derivative cells. Inset shows the number of colony for Mga5 KO cells. The treatment L4-PHA did not affect the anoikis sensitivity, indicating that L₄-PHA binding and anoikis interference was specific to β 1,6-GlcNAc branching. SSA treatment was slightly effective even for Mgat5 KO cells, which may suggest that sialic acids on N-glycan branches other than the β 1,6-GlcNAc branch, albeit minutely, contribute to anoikis resistance.

Supplementary Table 1: Lists of genes correlated to anoikis resistance.

See Supplementary File 1

Supplementary Table 2: Clinical information of colon cancer patients.

See Supplementary File 2