Supplemental Section

Supplemental Figure Legends

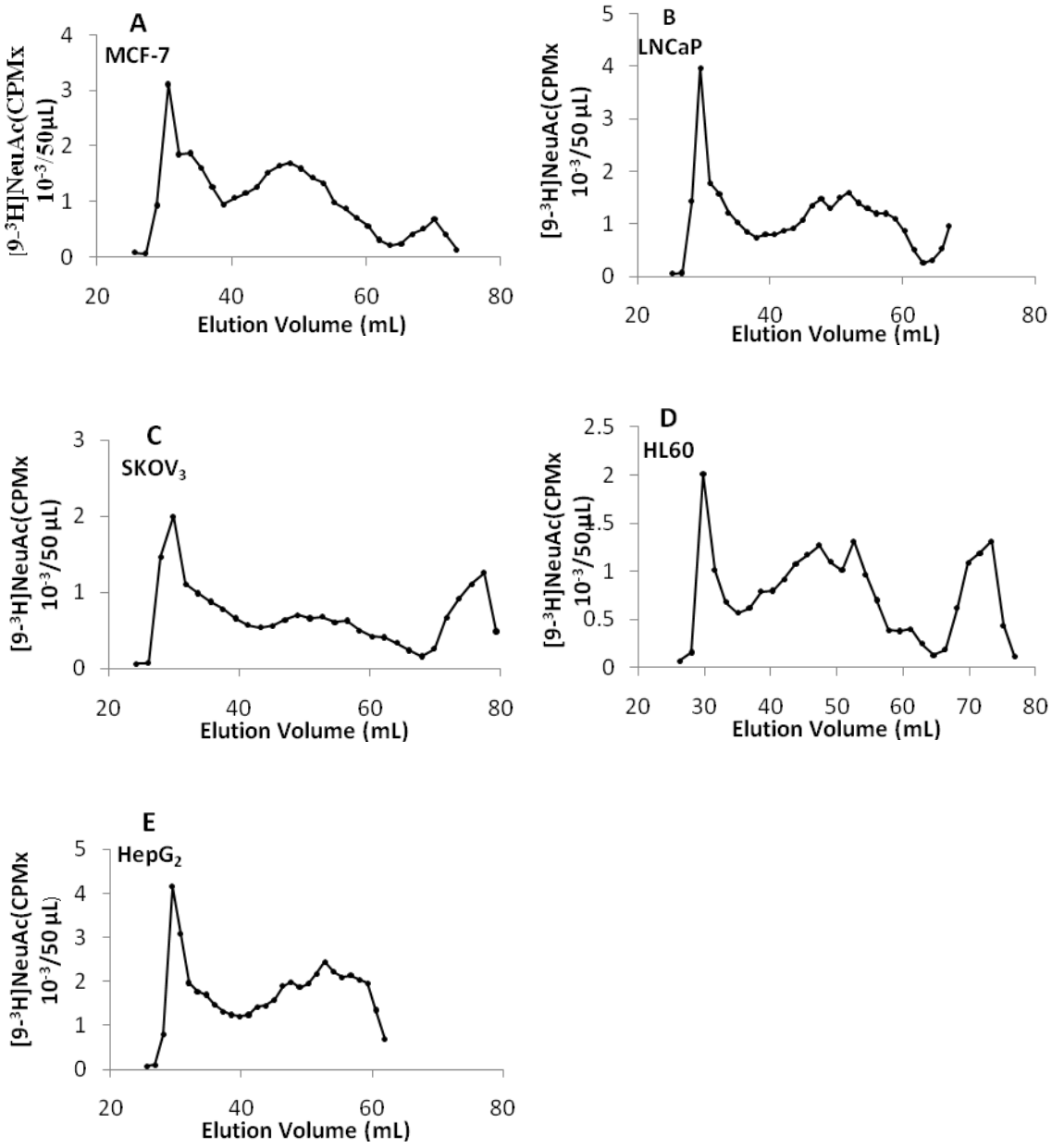
Sup Fig. 1. Pronase digestion followed by Biogel P6 size exclusion chromatography of glycopeptide fragments arising from [9-^{3}H] sialylated cellular glycoproteins from human cancer cell lines A: MCF-7; B: LNCaP; C: SKOV3; D: HL60; E: HepG2. Void volume in this column occurs at 30mL. Data for T47D and LS180 obtained using the identical protocol is provided in Fig. 2A (main manuscript)**.**

Sup Fig. 2. A comparison of Biogel P6 fractions resulting from mild alkaline borohydride treatment of [9-^{3}H] sialylated cellular glycoproteins from human cancer cell lines A: LNCaP; B: SKOV3; C: HL60; D: HepG2. Similar data for T47D, MCF-7 and LS180 is provided in Fig. 3A (main manuscript).

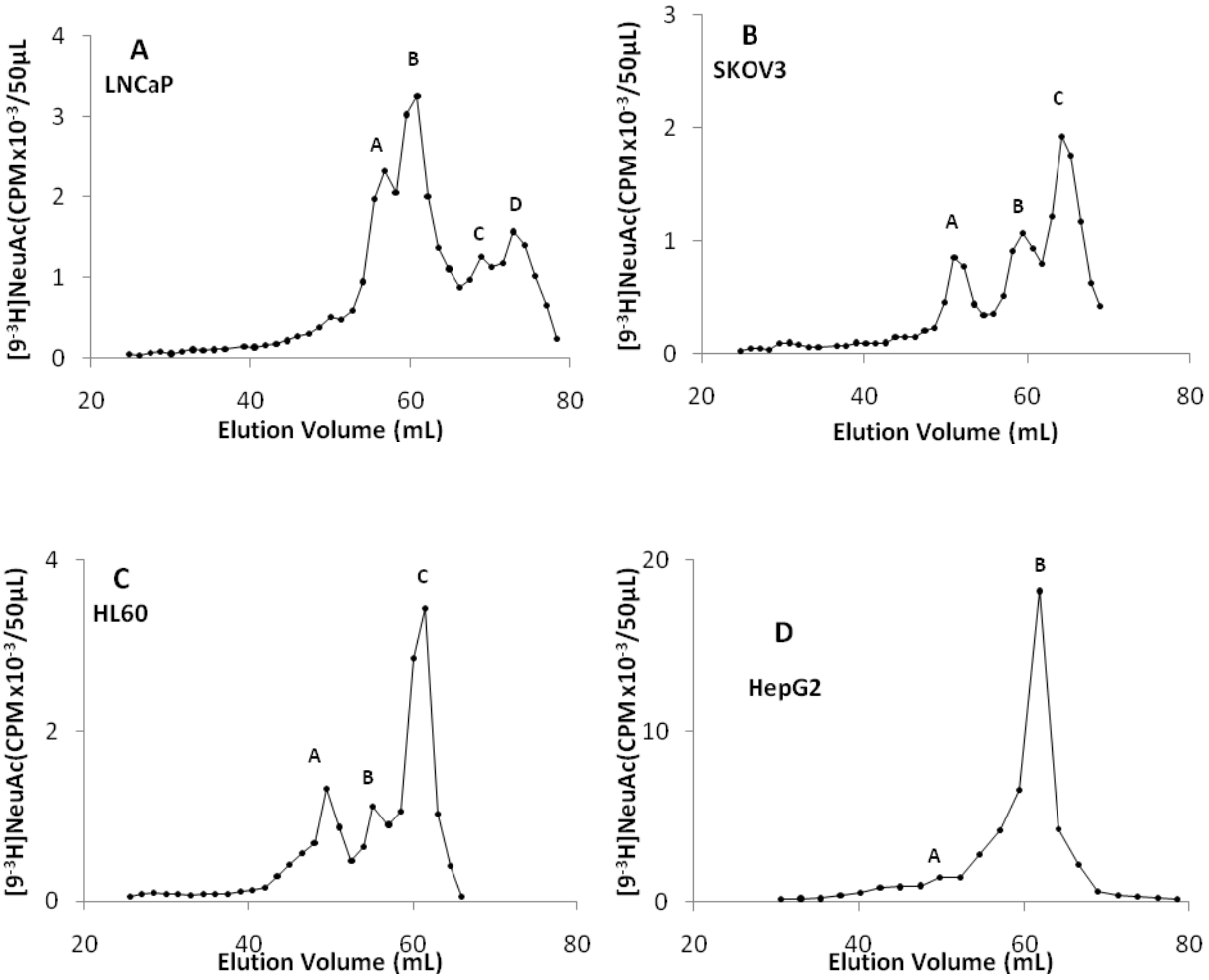
Sup Fig. 3. SDS-PAGE of [^{14}C] sialyl mucin glycoproteins present in human tumor specimens: An aliquot (20μL) of [^{14}C] sialyl dialyzed tumor extract preparation in SDS-buffer was denatured by boiling for 5 min and then subjected to SDS-PAGE in 4-20% polyacrylamide gradient gels. Following transfer to nitrocellulose membrane, radioactive glycoprotein bands were visualized by phosphorimaging. Lanes 1 to 3: Pancreas; Lane 4: Breast; Lane 5: Colon; Lanes 6, 7: Ovary; Lanes 8 to 10: Prostate.

Sup Fig 4. Characterization of [^{14}C] sialyl mucin glycoproteins present in human sera:
Panels A-D: Biogel P6 column chromatography after exhaustive pronase digestion of [^{14}C] sialyl serum mucin glycoprotein preparation (700μL): A: normal; B: ovarian cancer; C: pancreatic cancer and D: [^{14}C]sialyl fetuin.
Panels E-H: Biogel P6 column chromatography after mild alkaline borohydride treatment of [^{14}C] sialyl serum mucin glycoprotein preparation (500μL): E: normal; F: ovarian cancer; G: pancreatic cancer and H: [^{14}C]sialyl fetuin

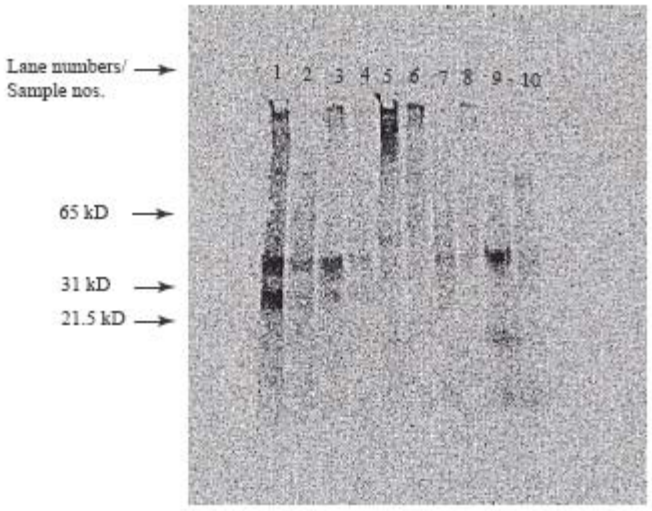
Sup Fig 1


A
MCF-7
[9-3H]NeuAc(CPMx 10-3/50µL)
Elution Volume (mL)
B
LNCaP
[9-3H]NeuAc(CPMx 10-3/50 µL)
Elution Volume (mL)
C
SKOV3
[9-3H]NeuAc(CPMx 10-3/50 µL)
Elution Volume (mL)
D
HL60
[9-3H]NeuAc(CPMx 10-3/50µL)
Elution Volume (mL)
E
HepG2
[9-3H]NeuAc(CPMx 10-3/50 µL)
Elution Volume (mL)

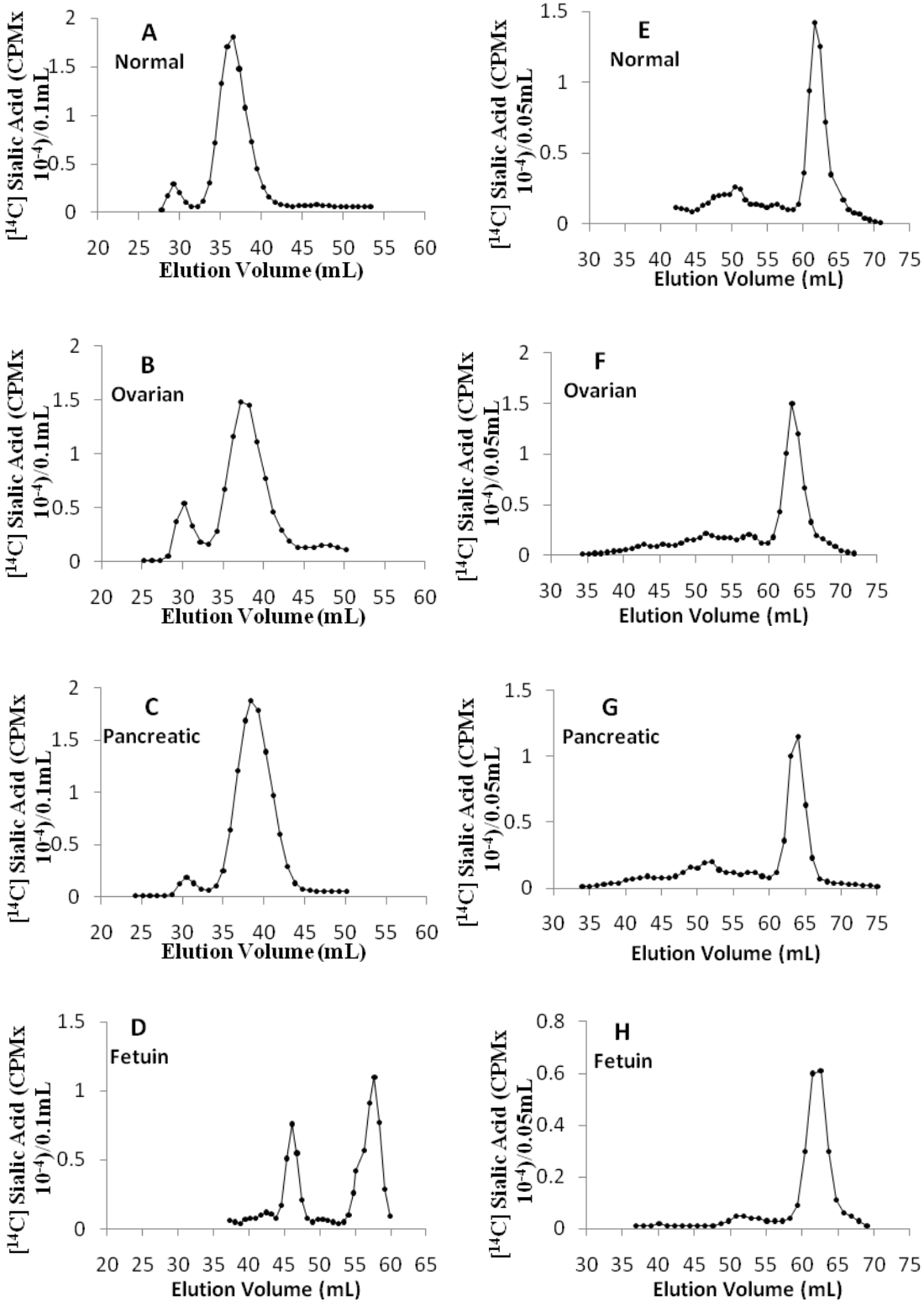
Sup Fig 2


A
LNCaP
B
SKOV3
C
HL60
D
HepG2
[9-3H]NeuAc(CPM x10-3/50µL
Elution Volume (mL)

Sup Fig 3



Sup Fig 4


A
Normal
B
Ovarian
C
Pancreatic
D
Fetuin
E
Normal
F
Ovarian
G
Pancreatic
H
Fetuin
[14C] Sialic Acid (CPMx 10-4)/0.1mL
[14C] Sialic Acid (CPMx 10-4)/0.05mL
Elution Volume (mL)