Figure S2

L-selectin

HPN DS6  HPN DS2  HPN DSN  HPN  HPN RS3
Figure S3A

E-selectin pH 7.4

CSA  CSE  HPN  HPN RS3

Charges:

+  0  -
Figure S3C

L-selectin pH 7.4

Charges:
- Blue: +
- White: 0
- Red: -
Figure S3D

L-selectin pH 5.6

CSA  CSE  HPN  HPN RS3

1/2  1/3  3  1/2

2  1  3  2

2  2  2  3

2  3  3  3

2  3  3  2

3  3  2  3

3  3  2  3
Figure S3F

P-selectin pH 5.6

CSA  CSE  HPN  HPN RS3

1  3  1  2
2  2  2  2/3
3  1  2  3

Charges:

+  0  -
Figure S3G

E-selectin

L-selectin

P-selectin

pH 7.4

pH 5.6
Figure S4

A

Sulfate position on HPN RS3

Higher frequency

B

Number of H-bonds/hexamer

Number of H-bonds/sulfate group
Selectin binding on MDA-MB-231
Effect of EDTA/Calcium

Figure S5

- E-selectin
- L-selectin
- P-selectin

- No Added Calcium
- 1 mM CaCl$_2$
- 2 mM CaCl$_2$
- 2 mM CaCl$_2$
- 2 mM CaCl$_2$
- + 5mM EDTA
- 5mM EDTA
Figure S6

Selectin binding on MDA-MB-231
Effect of Incubation in suspension

E-selectin  L-selectin

- Control for freshly detached cells
- Control for suspended cells (2 hrs)
- Selectin staining for freshly detached cells
- Selectin for suspended cells (2 hrs)
Selectins binding on MDA-MB-231
Effect of Glycosidases

- E-selectin
- P-selectin
- L-selectin

pH 7.4
2mM CaCl$_2$

pH 7.4
5mM EDTA

pH 5.6
5mM EDTA

- Control (secondary antibody)
- Untreated cells
- Chondroitinase abc
- Heparinase I
Figure S9

E-selectin (1GT)  L-selectin (3CFW)  P-selectin (1G1R)

GLU85  LYS 85  ARG 85
GLU80  GLU 80  HIS 108
GLU80  GLU 80  HIS 108

pH 7.4

GLU85  LYS 85  ARG 85
GLU80  GLU 80  HIS 108

pH 5.6