

Supplementary Information

Cholesterol-conjugated sulfated oligosaccharide PG545 disrupts lipid envelope of herpes simplex virus particles

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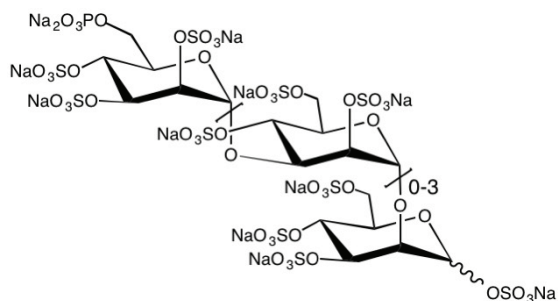
Contains:

Supplementary Figure 1

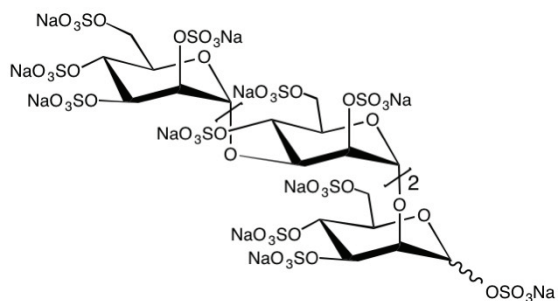
Supplementary Figure 2a,b

Supplementary Figure 1. Said et al.,

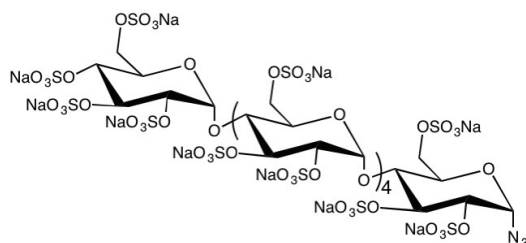
Muparfostat



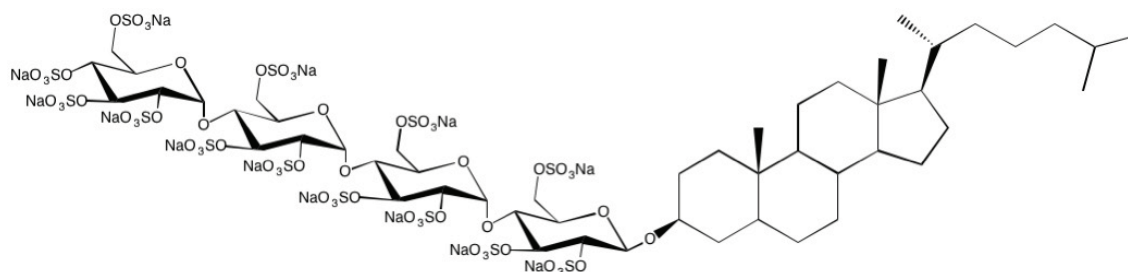
SM4



AM6

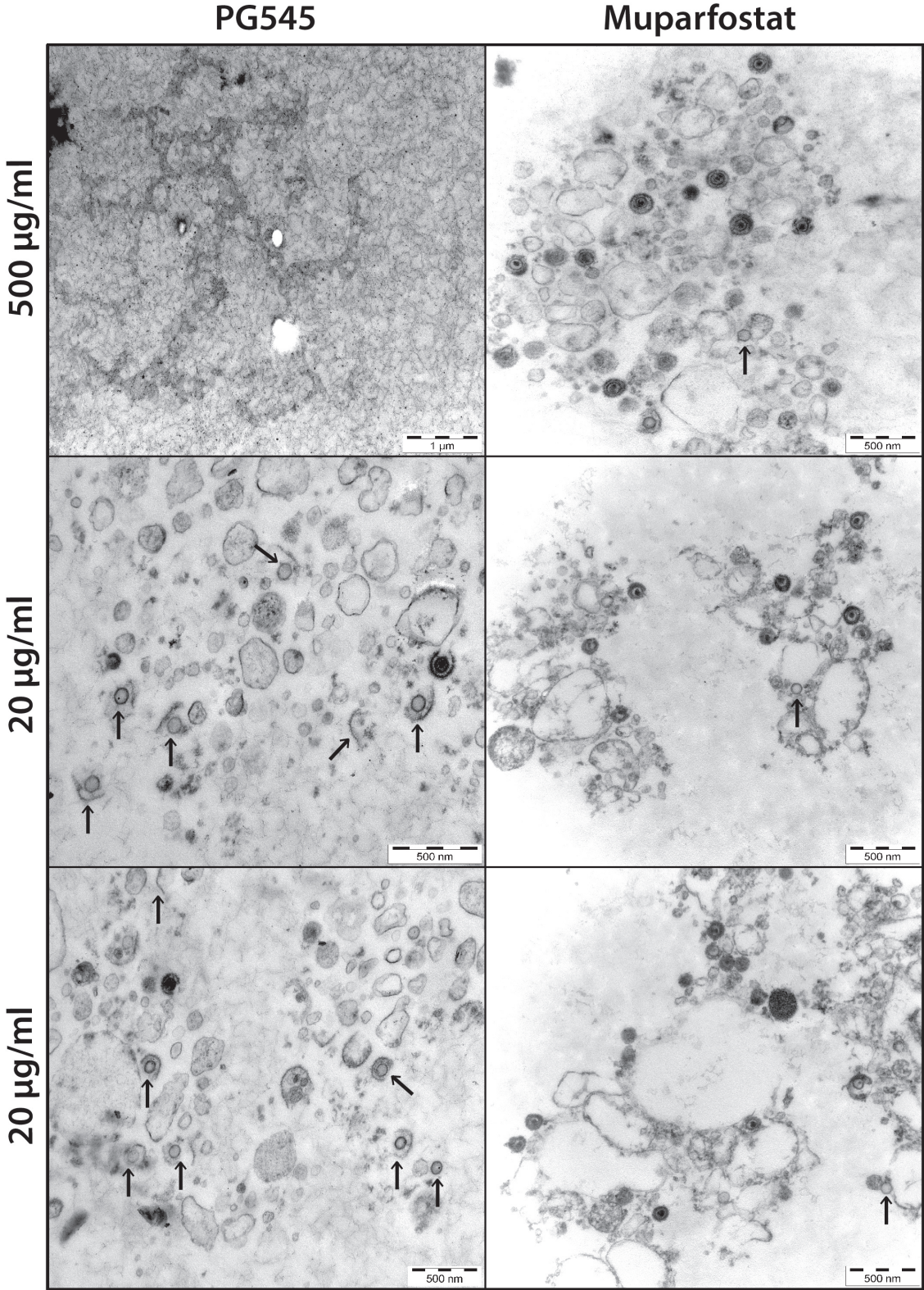


PG545

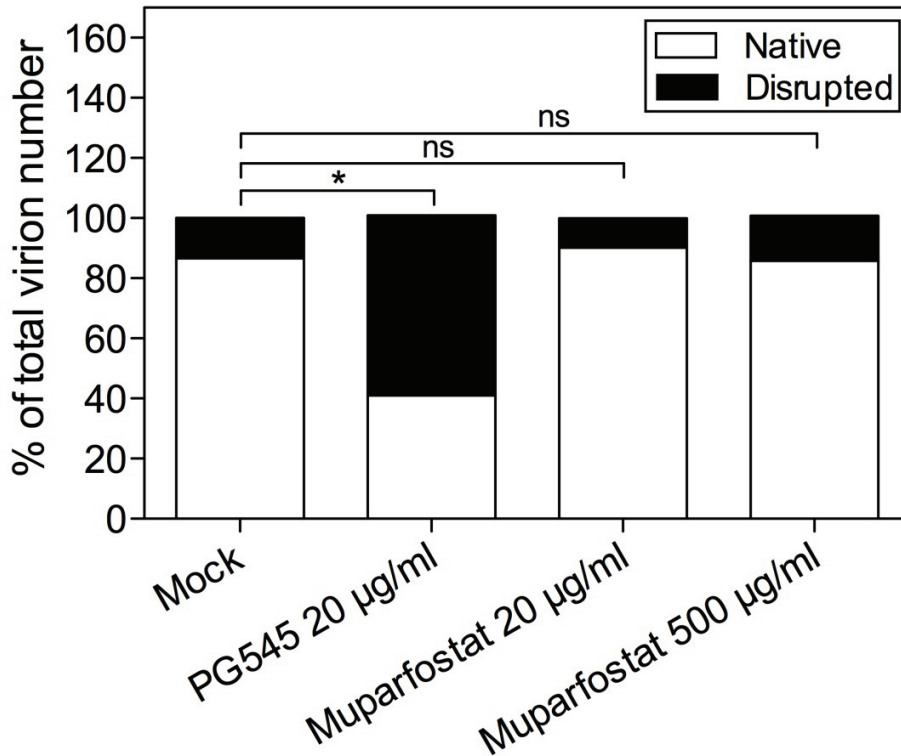


Supplementary Figure 1. Structures of native and modified sulfated oligosaccharides. Muparfostat is a mixture of mannose-containing di- to hexa-saccharides. SM4 is a tetrasaccharide fraction of muparfostat. AM6 is an alpha-2-azido-maltohexasose, and PG545 is a cholestanol-conjugated maltotetraose.

a



b



Supplementary Figure 2. PG545 disrupts HSV-2 particles. (a) Semipurified preparation of HSV-2 virions were incubated with indicated concentrations of PG545 or muparfostat for 30 min at 37°C, and then processed for electron microscopy. Disrupted viral particles are indicated with arrows. Images shown are representative of 10 images captured for each virus preparation treated with PG545 (20 µg/ml) or muparfostat (20 and 500 µg/ml). (b) HSV-2 particle counts in EM images. Data are shown as percentage of mean number of native and disrupted viral particles counted by two independent investigators in the same images. Total numbers of viral particles counted were 141 (mock), 112 (PG545-20 µg/ml), 102 (muparfostat-20 µg/ml), and 120 (muparfostat- 500 µg/ml). Asterisk denotes a significant difference as calculated by Student's t-test $*P < 0.05$, ns, not significant.