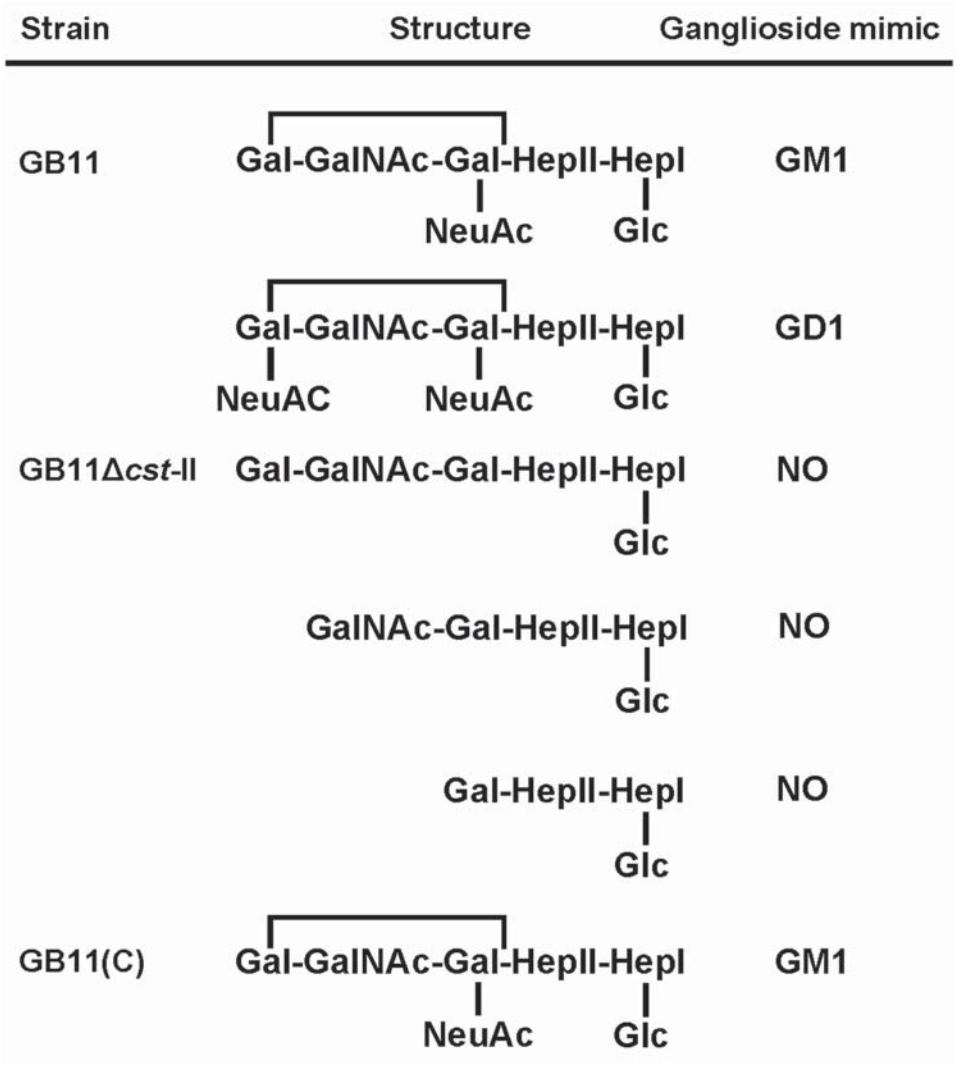

Fig. S1 Proposed LOS outer core structures as determined by mass spectrometry analysis. The brackets indicate the segment of the lipooligosaccharide outer cores that are mimicking the human gangliosides on the peripheral nerves. The HepI of the inner core is linked to a Kdo residue that is linked to the lipid A portion of the LOS structure (12). Note that GB11 expresses a mixture of ganglioside-like LOS structures GM1 and GD1, whereas knock out mutagenesis of *cst*-II in GB11 resulted in loss of ganglioside-like LOS expression. Complementation of *cst*-II in GB11 (C) resulted in restored expression of ganglioside-like structure GM1, but not GD1.

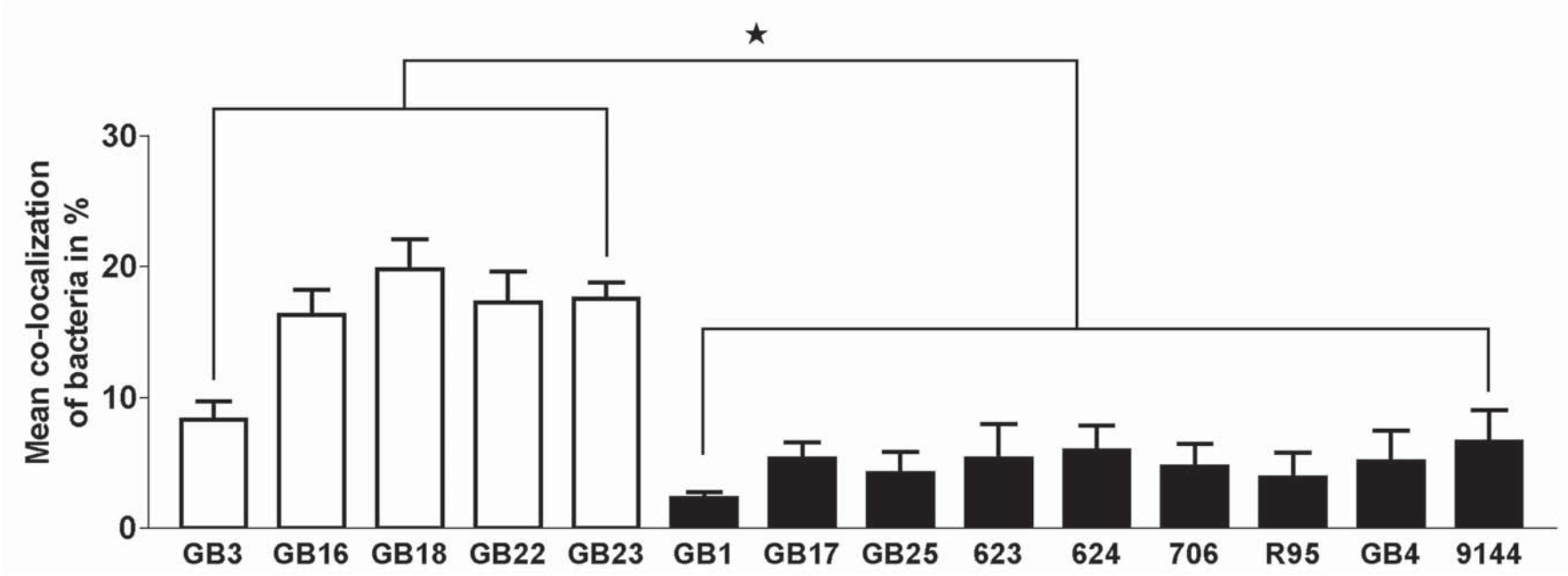

Fig. S2 GM+ isolates outnumbers GM- isolates in co-localization with LysoTracker DND-99. Caco-2 cells were paraformaldehyde fixed at 2 hours post-infection and processed for immuno-fluorescence. The co-localization of *C. jejuni* isolates with LysoTracker DND-99 was quantified for GM+ (white bars) and GM- (black bars) isolates and results are expressed as, mean co-localization of bacteria in percentage. Error bars show the standard error of the mean of three independent experiments. The difference in co-localization with LysoTracker DND-99 between GM+ versus GM- isolates was significant (Mann-Whitney U test, * $p < 0.0001$).

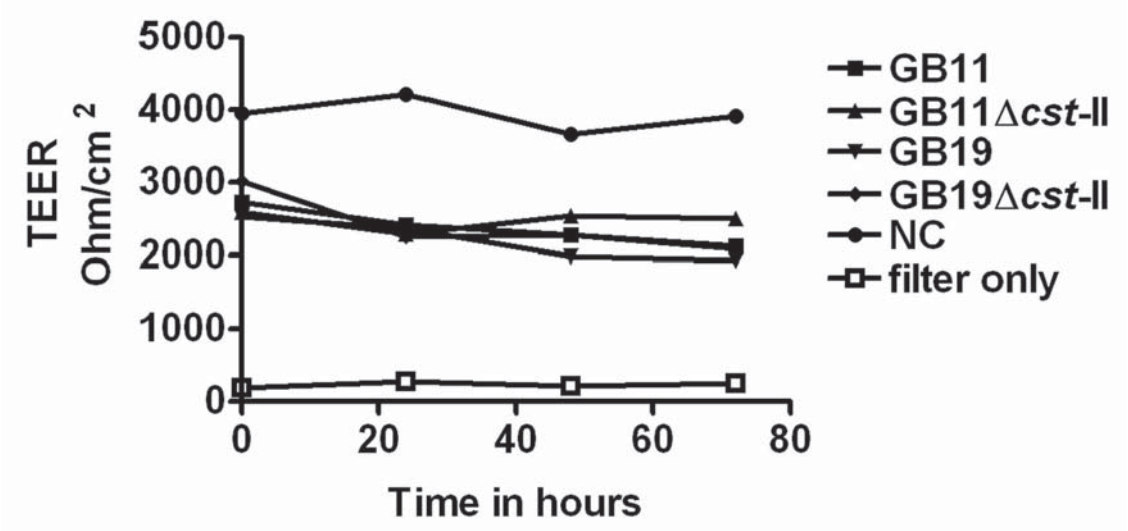

Fig. S3 Change in TEER of *C. jejuni*-infected Caco-2 cells. Change in TEER of Caco-2 monolayers is shown in Ohm (electrical resistance) per cm^2. Multiplicity of infection (MOI) was 10 of the starting *C. jejuni* inoculum. Time of the measurements is shown in hours. TEER results are expressed as mean values. TEER results shown for strain GB11, GB19, GB11Δ*cst*-II, GB19Δ*cst*-II, NC (Caco-2 cells only without bacteria) and filter only (Transwell without Caco-2 cells) measured at the time points 0, 24, 48 and 72 hours.