**Table S1**: Localizations and DNA coordinates for nod genes in NRRL B16219 and Dg1 genomes

|  |  |  |
| --- | --- | --- |
|  | NRRL B-16219Locus Tag (DNA Coordinates) | Dg1Locus Tag (DNA Coordinates) |
| Beta-1,4-N-acetylglucosamine oligosaccharide 6-O-sulfotransferase **NodH** ABC transporter efflux protein, DrrB family **NodI**ABC-2 type transport system ATP-binding protein **NodJ**Beta-1,4-N-acetylglucosaminyltransferase **NodC** Chitooligosaccharide deacylase, NodA1 | BBK14\_31585 (3203-3895)BK14\_31590 (4234-5169)BBK14\_31595 (5166-6140)BBK14\_31600 (6298-7617)BBK14\_31605 (7636-8145) | -FsymDg\_3087 (3665687-3666622)FsymDg\_3086 (3664716-3665690)FsymDg\_3085 (3663249-3664562)FsymDg\_3084 (3662361-3663230) |
| beta-1,4-N-acetylglucosamine oligosaccharide N-acyltransferase **NodA**beta-1,4-N-acetylglucosamine oligosaccharide deacetylase **NodB (91.30)**Beta-1,4-N-acetylglucosamine oligosaccharide 6-O-sulfotransferase **NodH**  | BBK14\_31085 (3037-3618)BBK14\_31090 (3778-4470)BBK14\_31110 (8347-8919) | FsymDg\_2092 (2488619-2489200)FsymDg\_2093 (2489359-2490051)- |