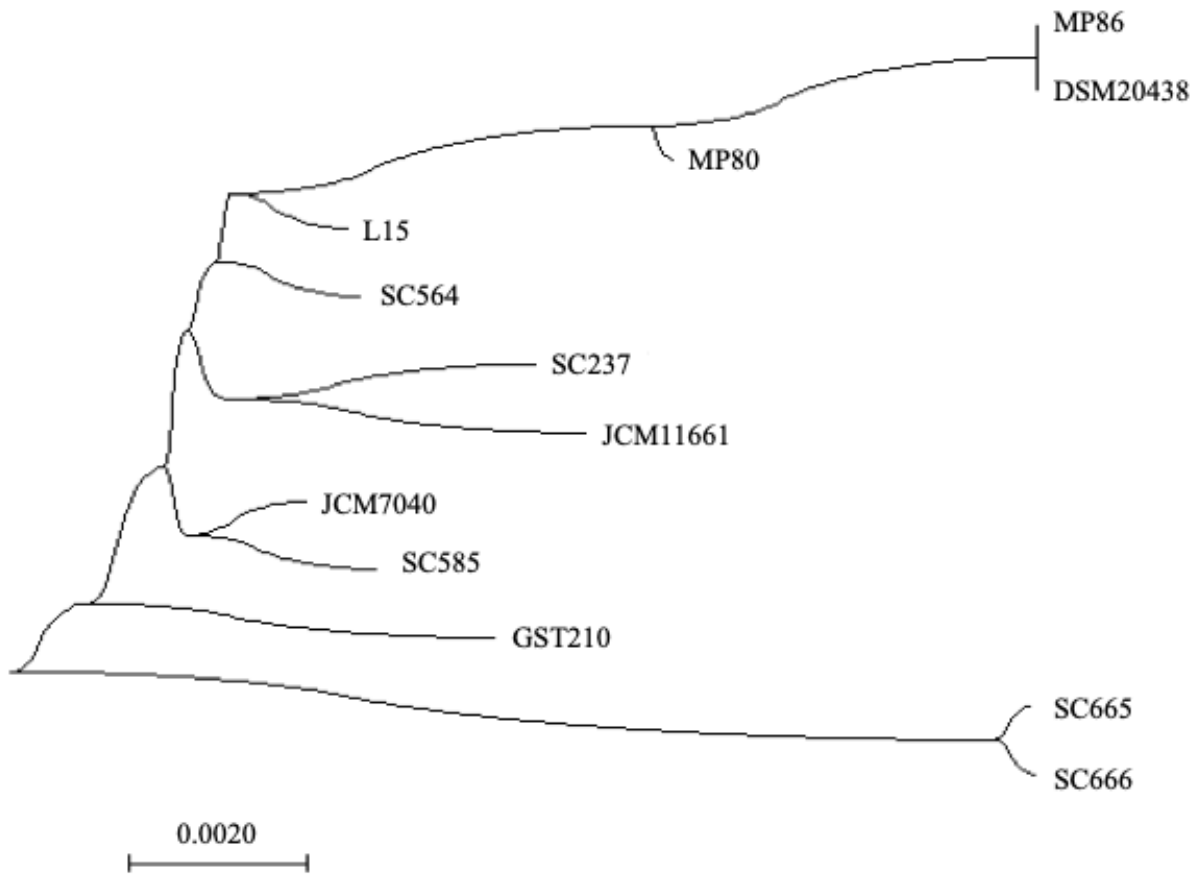


1 Supplemental Tables and Figures

2 **Figure S1.** Phylogenetic relatedness of the unique *B. pseudocatenulatum* allelic profiles as  
3 determined by multilocus sequence typing. Evolutionary history was inferred using the  
4 Minimum Evolution method, followed by 1000 bootstrap replicates.



5

6

7 **Table S1.** Glycoprofiling of consumed HMOs by *B. pseudocatenulatum* isolates (n = 12) achieved at 96 h on 2% (w/v) pooled human  
8 milk oligosaccharides. Percent consumption was calculated as the difference in HMO structure abundance at 96 h relative to 0 h.  
9 Negative values represent lack of consumption. *B. pseudocatenulatum* strains (SC237, SC564, SC585, SC665, SC566, MP80, MP86,  
10 JCM7040, JCM11661, GST210, and L15), *B. longum* subsp. *infantis* ATCC15697, *B. animalis* subsp. *lactis* ATCC27536. HMOs: 2'-  
11 fucosyllactose (2'-FL), Lactodifucotetraose (LDFT), Lacto-*N*-tetraose (LNT), Lacto-*N*-neotetraose (LNnT), Lacto-*N*-fucopentaose  
12 type I, II, and III (LNFP I, II, and III), and Lacto-*N*-difucohexaose type I and II (LNDFH I and II), Monofucosyllacto-*N*-hexaose  
13 (MFLNH I and III), Difucosyl-para-lacto-*N*-hexose type II (DFpLNH II), Difucosyllacto-*N*-hexose type B and A (DFLNH B and A),  
14 Trifucosyllacto-*N*-hexose (TFLNH).

	2'FL	LDFT	LNT/ LNnT	LNFP II	LNFP I/ LNFP III	LNDFH I/ LNDFH II	MFLNH III/ MFLNH I	DFpLNH II	DFLNH B	DFLNH A	TFLNH
SC237	-50.97	<b>40.20</b>	-24.39	<b>60.45</b>	-29.79	-62.03	-32.65	-49.35	-34.07	-34.38	-35.78
SC564	-52.28	<b>35.28</b>	<b>96.42</b>	<b>4.78</b>	-35.83	-54.49	-45.75	-180.84	-102.09	-61.89	-93.66
SC585	<b>98.13</b>	<b>100.00</b>	-19.33	-42.01	<b>85.01</b>	-49.08	-37.62	-47.89	-28.23	-34.64	-33.05
SC665	-68.27	<b>25.99</b>	<b>95.29</b>	-89.16	-38.08	-79.63	-41.15	-233.38	-126.05	-85.21	-108.53
SC666	-48.92	<b>37.79</b>	<b>95.70</b>	<b>61.67</b>	-23.75	-58.32	-30.68	-47.58	-77.77	-49.31	-67.83
MP80	<b>98.07</b>	<b>100.00</b>	<b>96.68</b>	<b>17.10</b>	<b>55.96</b>	<b>55.24</b>	-30.88	-235.12	-78.13	-27.92	-74.32
MP86	<b>97.94</b>	<b>100.00</b>	<b>95.76</b>	-116.82	<b>81.09</b>	-78.95	-55.19	-169.11	-114.39	-31.75	-93.60
JCM7040	<b>97.33</b>	<b>100.00</b>	<b>95.57</b>	-74.52	<b>82.27</b>	-49.56	-54.60	-150.45	-94.97	-39.63	-101.08

JCM11661	<b>21.58</b>	<b>26.97</b>	<b>95.21</b>	<b>27.50</b>	-22.74	-102.34	-64.97	-85.56	-121.30	-65.04	-121.91
GST210	-22.50	<b>47.07</b>	<b>96.60</b>	<b>32.21</b>	<b>7.37</b>	-26.73	-39.67	-37.96	-50.23	-25.36	-54.90
L15	-47.61	<b>38.73</b>	-20.94	-30.40	-19.36	-52.28	-16.34	-38.93	-25.05	-36.61	-22.18
DSM20438	<b>97.54</b>	<b>99.24</b>	<b>94.71</b>	-44.71	<b>80.55</b>	-104.66	-42.73	-123.42	-109.21	-68.45	-101.22
ATCC15697	-59.87	<b>12.06</b>	<b>99.22</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>
ATCC27536	-23.23	<b>35.46</b>	-13.20	<b>9.65</b>	-23.48	-26.16	-31.60	-49.12	-20.08	-37.89	-35.40

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16 **Table S2.** Summary of *B. pseudocatenulatum* genomes.

17

	SC585	MP80	JCM7040	JCM11661	GST210	L15	DSM20438 <sup>a</sup>
Whole Genome Size (bp)	2252718	2356572	2282098	2262265	2172804	2237466	2323752
Number of Contigs	124	2	131	110	111	90	1
Shortest Contig (bp)	207	37424	203	191	200	200	NA
Longest Contig (bp)	174712	2319148	181319	194473	174301	183109	2323752
Annotated Gene Count	1873	1942	1910	1963	1852	1872	1892
GC Content (%)	56.2	56.4	56.0	56.6	56.3	56.7	56.4

a: Information obtained from *B. pseudocatenulatum* DSM20438's publicly available genome (Genbank Accession:

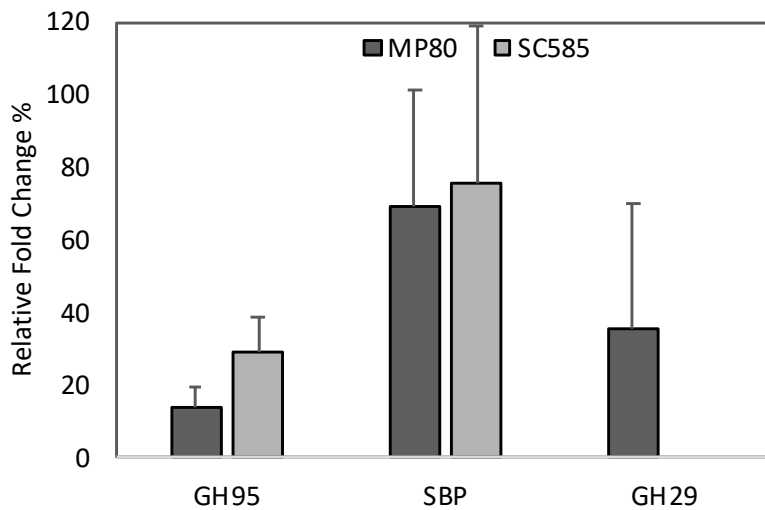
AP012330). NA: not available

18 **Table S3.** Genome accession numbers for strain homology analysis in Figure 4. NCBI accession  
 19 numbers begin with GCA while IMG/JGI Analysis IDs begin with Ga.

Species	Strain	Accession
<i>B. animalis</i> subsp. <i>lactis</i>	ATCC 27673	GCA_000471945.1
<i>B. kashiwanohense</i>	PV20-2	GCA_000800455.1
<i>B. longum</i> subsp. <i>infantis</i>	ATCC 15697	GCA_000020425.1
<i>B. longum</i> subsp. <i>longum</i>	SC596	Ga0009797
<i>B. pseudocatenulatum</i>	12	GCA_003952825.1
<i>B. pseudocatenulatum</i>	121.5	GCA_001576885.1
<i>B. pseudocatenulatum</i>	1896B	GCA_002075945.1
<i>B. pseudocatenulatum</i>	1E	GCA_002271255.1
<i>B. pseudocatenulatum</i>	2789STDY5834840	GCA_001405035.1
<i>B. pseudocatenulatum</i>	AF02-36-1	GCA_003466105.1
<i>B. pseudocatenulatum</i>	AF03-28	GCA_003465775.1
<i>B. pseudocatenulatum</i>	AF11-18	GCA_003465135.1
<i>B. pseudocatenulatum</i>	AF12-10-6.0	GCA_003465065.1
<i>B. pseudocatenulatum</i>	AF12-8A-LB	GCA_003465385.1
<i>B. pseudocatenulatum</i>	AF12-8LB-d	GCA_003464925.1
<i>B. pseudocatenulatum</i>	AF17-20AC	GCA_003460425.1
<i>B. pseudocatenulatum</i>	AF18-2AC	GCA_003459865.1
<i>B. pseudocatenulatum</i>	AF20-20AC	GCA_003459475.1
<i>B. pseudocatenulatum</i>	AF26-1	GCA_003458965.1
<i>B. pseudocatenulatum</i>	AF36-12AT	GCA_003474835.1
<i>B. pseudocatenulatum</i>	AF41-3MH	GCA_003474525.1
<i>B. pseudocatenulatum</i>	AF45-10BH	GCA_003474015.1
<i>B. pseudocatenulatum</i>	AM08-2	GCA_003472725.1
<i>B. pseudocatenulatum</i>	AM08-25	GCA_003472685.1
<i>B. pseudocatenulatum</i>	AM10-2	GCA_003472575.1
<i>B. pseudocatenulatum</i>	AM10-24	GCA_003472545.1
<i>B. pseudocatenulatum</i>	AM11-10	GCA_003472415.1
<i>B. pseudocatenulatum</i>	AM13-2	GCA_003473115.1
<i>B. pseudocatenulatum</i>	AM13-8	GCA_003473025.1
<i>B. pseudocatenulatum</i>	AM18-42	GCA_003471505.1
<i>B. pseudocatenulatum</i>	AM19-19	GCA_003470545.1
<i>B. pseudocatenulatum</i>	AM20-1	GCA_003471415.1
<i>B. pseudocatenulatum</i>	AM20-6	GCA_003471325.1
<i>B. pseudocatenulatum</i>	AM20-9-6.0	GCA_003471295.1
<i>B. pseudocatenulatum</i>	AM26-14LB	GCA_003470125.1
<i>B. pseudocatenulatum</i>	AM33-6	GCA_003468555.1

B. pseudocatenulatum	AM36-2AC	GCA_003467785.1
B. pseudocatenulatum	AM36-5BH	GCA_003467755.1
B. pseudocatenulatum	AM38-8	GCA_003467515.1
B. pseudocatenulatum	AM43-10	GCA_003467065.1
B. pseudocatenulatum	ca_0067	GCA_004167565.1
B. pseudocatenulatum	CA-05	GCA_001685965.1
B. pseudocatenulatum	CA-B29	GCA_001685985.1
B. pseudocatenulatum	CA-C29	GCA_001686005.1
B. pseudocatenulatum	CA-K29a	GCA_001686045.1
B. pseudocatenulatum	CA-K29b	GCA_001686065.1
B. pseudocatenulatum	CECT 7765	GCA_000940535.1
B. pseudocatenulatum	CF01-1	GCA_003463615.1
B. pseudocatenulatum	D2CA	Ga0009934
B. pseudocatenulatum	DSM 20438	GCA_001025215.1
B. pseudocatenulatum	GST 210	Ga0064498
B. pseudocatenulatum	IPLA 36007	GCA_000708005.1
B. pseudocatenulatum	JCM 11661	Ga0064497
B. pseudocatenulatum	JCM 7040	Ga0024098
B. pseudocatenulatum	L15	Ga0064499
B. pseudocatenulatum	MP80	Ga0224696
B. pseudocatenulatum	OF01-12	GCA_003463505.1
B. pseudocatenulatum	OF01-2	GCA_003463455.1
B. pseudocatenulatum	OF01-21AC	GCA_003463265.1
B. pseudocatenulatum	OF01-8	GCA_003463425.1
B. pseudocatenulatum	OF05-12	GCA_003439655.1
B. pseudocatenulatum	OM05-2	GCA_003438405.1
B. pseudocatenulatum	OM10-8	GCA_003438015.1
B. pseudocatenulatum	SC585	Ga0064049
B. pseudocatenulatum	TF05-19AC	GCA_003437835.1
B. pseudocatenulatum	TF05-2AC	GCA_003437825.1
B. pseudocatenulatum	TF07-23	GCA_003437155.1
B. pseudocatenulatum	TF07-45	GCA_003437075.1
B. pseudocatenulatum	TF08-3AT	GCA_003436955.1
B. pseudocatenulatum	TM01-4	GCA_003436675.1
B. pseudocatenulatum	TM04-13	GCA_003436545.1
B. pseudocatenulatum	TM05-11	GCA_003437435.1
B. pseudocatenulatum	TM07-3AT	GCA_003436315.1
B. pseudocatenulatum	TM08-2	GCA_003436105.1
B. pseudocatenulatum	TM10-1	GCA_003436025.1

21 **Figure S2.** Relative expression of putative HMO utilization genes. *B. pseudocatenulatum*  
22 MP80's SBP (Ga0224696\_111933),  $\alpha$ -fucosidase GH29 (Ga0224696\_111927), and  $\alpha$ -fucosidase  
23 GH95 (Ga0224696\_111926) and *B. pseudocatenulatum* SC585's SBP (Ga0064049\_111418) and  
24  $\alpha$ -fucosidase GH95 (Ga0064049\_111413) when grown on 2% 2'-fucosyllactose. Expression is in  
25 fold-change relative to growth on 2% glucose. Error bars represent standard error of fold change.



27 **Table S4:** Binding of the fucosidase cluster solute-binding protein from *B. pseudocatenuatum*  
 28 MP80 to various human milk oligosaccharides.

Binding level	MW (Da)	Common name	Structure
High	488.17	2'-fucosyllactose	<b><math>\alpha</math>-L-Fuc-(1,2)-<math>\beta</math>-D-Gal-(1,4)-<math>\beta</math>-D-Glc</b>
	488.17	3-fucosyllactose	<b><math>\beta</math>-D-Gal-(1,4)-[<math>\alpha</math>-L-Fuc-(1,3)]-<math>\beta</math>-D-Glc</b>
Medium	633.21	6'-sialyllactose	$\alpha$ -D-Neu5Ac-(2,6)- $\beta$ -D-Gal-(1,4)- $\beta$ -D-Glc
	634.23	Difucosyllactose	<b><math>\alpha</math>-L-Fuc-(1,2)-<math>\beta</math>-D-Gal-(1,4)-[<math>\alpha</math>-L-Fuc-(1,3)]-<math>\beta</math>-D-Glc</b>
	707.25	Lacto- <i>N</i> -tetraose	$\beta$ -D-Gal-(1,3)- $\beta$ -D-GlcNAc-(1,3)- $\beta$ -D-Gal-(1,4)- $\beta$ -D-Glc
	707.25	Lacto- <i>N</i> -neotetraose	$\beta$ -D-Gal-(1,4)- $\beta$ -D-GlcNAc-(1,3)- $\beta$ -D-Gal-(1,4)- $\beta$ -D-Glc
	853.31	Lacto- <i>N</i> -fucopentaose I	<b><math>\alpha</math>-L-Fuc-(1,2)-<math>\beta</math>-D-Gal-(1,3)-<math>\beta</math>-D-GlcNAc-(1,3)-<math>\beta</math>-D-Gal-(1,4)-<math>\beta</math>-D-Glc</b>
	853.31	Lacto- <i>N</i> -fucopentaose II	$\beta$ -D-Gal-(1,3)-[ <b><math>\alpha</math>-L-Fuc-(1,4)</b> ]- $\beta$ -D-GlcNAc-(1,3)- $\beta$ -D-Gal-(1,4)- $\beta$ -D-Glc
	853.31	Lacto- <i>N</i> -fucopentaose III	$\beta$ -D-Gal-(1,4)-[ <b><math>\alpha</math>-L-Fuc-(1,3)</b> ]- $\beta$ -D-GlcNAc-(1,3)- $\beta$ -D-Gal-(1,4)- $\beta$ -D-Glc
	853.31	Lacto- <i>N</i> -neofucopentaose V	$\beta$ -D-Gal-(1,3)- $\beta$ -D-GlcNAc-(1,3)- $\beta$ -D-Gal-(1,4)-[ <b><math>\alpha</math>-L-Fuc-(1,3)</b> ]- $\beta$ -D-Glc
	853.31	Lacto- <i>N</i> -neofucopentaose	$\beta$ -D-Gal-(1,4)- $\beta$ -D-GlcNAc-(1,3)- $\beta$ -D-Gal-(1,4)[ <b><math>\alpha</math>-L-Fuc-(1,3)</b> ]- $\beta$ -D-Glc
	998.34	Sialyllacto- <i>N</i> -tetraose B	$\alpha$ -D-Neu5Ac-(2,6)-[ $\beta$ -D-Gal-(1,3)]- $\beta$ -D-GlcNAc-(1,3)- $\beta$ -D-Gal-(1,4)- $\beta$ -D-Glc
	998.34	Sialyllacto- <i>N</i> -tetraose C	$\alpha$ -D-Neu5Ac-(2,6)- $\beta$ -D-Gal-(1,4)- $\beta$ -D-GlcNAc-(1,3)- $\beta$ -D-Gal-(1,4)- $\beta$ -D-Glc
	998.34	Sialyllacto- <i>N</i> -tetraose D	$\alpha$ -D-Neu5Ac-(2,3)- $\beta$ -D-Gal-(1,4)- $\beta$ -D-GlcNAc-(1,3)- $\beta$ -D-Gal-(1,4)- $\beta$ -D-Glc
	999.36	Lacto- <i>N</i> -difucohexaose I	<b><math>\alpha</math>-L-Fuc-(1,2)-<math>\beta</math>-D-Gal-(1,3)-[<math>\alpha</math>-L-Fuc-(1,4)]-<math>\beta</math>-D-GlcNAc-(1,3)-<math>\beta</math>-D-Gal-(1,4)-<math>\beta</math>-D-Glc</b>
	999.36	Lacto- <i>N</i> -difucohexaose II	$\beta$ -D-Gal-(1,3)-[ <b><math>\alpha</math>-L-Fuc-(1,4)</b> ]- $\beta$ -D-GlcNAc-(1,3)- $\beta$ -D-Gal-(1,4)-[ <b><math>\alpha</math>-L-Fuc-(1,3)</b> ]- $\beta$ -D-Glc
	999.36	Lacto- <i>N</i> -neodifucohexaose	$\beta$ -D-Gal-(1,4)-[ <b><math>\alpha</math>-L-Fuc-(1,3)</b> ]- $\beta$ -D-GlcNAc-(1,3)- $\beta$ -D-Gal-(1,4)-[ <b><math>\alpha</math>-L-Fuc-(1,3)</b> ]- $\beta$ -D-Glc
	1072.38	Para-lacto- <i>N</i> -neohexaose	$\beta$ -D-Gal-(1,4)- $\beta$ -D-GlcNAc-(1,3)- $\beta$ -D-Gal-(1,4)- $\beta$ -D-GlcNAc-(1,3)- $\beta$ -D-Gal-(1,4)- $\beta$ -D-Glc
	1072.38	Lacto- <i>N</i> -neohexaose	$\beta$ -D-Gal-(1,4)- $\beta$ -D-GlcNAc-(1,6)-[ $\beta$ -D-Gal-(1,4)- $\beta$ -D-GlcNAc-(1,3)]- $\beta$ -D-Glc-(1,4)-Glc
	1364.50	Difucosyllacto- <i>N</i> -hexaose A	$\beta$ -D-Gal-(1,4)-[ <b><math>\alpha</math>-L-Fuc-(1,3)</b> ]- $\beta$ -D-GlcNAc-(1,6)-[ <b><math>\alpha</math>-L-Fuc-(1,2)</b> ]- $\beta$ -D-Gal-(1,3)- $\beta$ -D-GlcNAc-(1,3)]- $\beta$ -D-Gal-(1,4)- $\beta$ -D-Glc



	1364.50	Difucosyl-paralacto- <i>N</i> -hexaose	$\beta$ -D-Gal-(1,3)-[ $\alpha$ -L-Fuc-(1,4)]- $\beta$ -D-GlcNAc-(1,3)- $\beta$ -D-Gal-(1,4)-[ $\alpha$ -L-Fuc-(1,3)]- $\beta$ -D-GlcNAc-(1,3)- $\beta$ -D-Gal-(1,4)- $\beta$ -D-Glc
	545.48	Lacto- <i>N</i> -triose	$\beta$ -D-GlcNAc-(1,3)- $\beta$ -D-Gal(1,4)- $\beta$ -D-Glc
	691.62	Blood group A antigen tetraose type 5	$\alpha$ -D-GalNAc-(1,3)-[ $\alpha$ -L-Fuc-(1,2)]- $\beta$ -D-Gal-(1,4)- $\beta$ -D-Glc
	1056.96	Blood group A antigen hexaose type 1	$\alpha$ -D-GalNAc-(1,3)-[ $\alpha$ -L-Fuc-(1,2)]- $\beta$ -D-Gal-(1,3)- $\beta$ -GlcNAc(1,3)- $\beta$ -D-Gal(1,4)- $\beta$ -D-Glc
	633.21	3'-sialyllactose	$\alpha$ -D-Neu5Ac-(2,3)- $\beta$ -D-Gal-(1,4)- $\beta$ -D-Glc
	779.27	3'-sialyl-3'-fucosyllactose	$\alpha$ -D-Neu5Ac-(2,3)- $\beta$ -D-Gal-(1,4)-[ $\alpha$ -L-Fuc-(1,3)]- $\beta$ -D-Glc
	998.34	Sialyllacto- <i>N</i> -tetraose a	$\alpha$ -D-Neu5Ac-(2,3)- $\beta$ -D-Gal-(1,3)- $\beta$ -D-GlcNAc-(1,3)- $\beta$ -D-Gal-(1,4)- $\beta$ -D-Glc
	1144.40	Sialyl monofucosyllacto- <i>N</i> -tetraose	$\alpha$ -D-Neu5Ac-(2,3)- $\beta$ -D-Gal-(1,3)-[ $\alpha$ -L-Fuc-(1,4)]- $\beta$ -D-GlcNAc-(1,3)- $\beta$ -D-Gal-(1,4)- $\beta$ -D-Glc
Low / no binding	1144.40	Sialyl-lacto- <i>N</i> -fucopentaose V	$\alpha$ -L-Fuc-(1,2)- $\beta$ -D-Gal-(1,3)-[ $\alpha$ -D-Neu5Ac-(2,6)]- $\beta$ -D-GlcNAc-(1,3)- $\beta$ -D-Gal-(1,4)- $\beta$ -D-Glc
	1289.44	Disialyllacto- <i>N</i> -tetraose	$\alpha$ -D-Neu5Ac-(2,3)- $\beta$ -D-Gal-(1,3)-[ $\alpha$ -D-Neu5Ac-(2,6)]- $\beta$ -D-GlcNAc-(1,3)- $\beta$ -D-Gal-(1,4)- $\beta$ -D-Glc
	1438.29	Lacto- <i>N</i> -neooctaose	$\beta$ -D-Gal-(1,4)- $\beta$ -D-GlcNAc-(1,3)- $\beta$ -D-Gal(1,4)- $\beta$ -D-GlcNAc(1,3)- $\beta$ -D-Gal(1,4)- $\beta$ -D-GlcNAc(1,3)- $\beta$ -D-Gal(1,4)- $\beta$ -D-Glc

30 **Table S5:** Binding of the fucosidase cluster solute-binding protein from *B. pseudocatenuatum*  
 31 SC585 to various human milk oligosaccharides.

Binding level	MW (Da)	Common name	Structure
High	488.17	2'-fucosyllactose	<b><math>\alpha</math>-L-Fuc-(1→2)</b> - $\beta$ -D-Gal-(1→4)- $\beta$ -D-Glc
	488.17	3-fucosyllactose	$\beta$ -D-Gal-(1→4)-[ <b><math>\alpha</math>-L-Fuc-(1→3)</b> ]- $\beta$ -D-Glc
	633.21	3'-sialyllactose	$\alpha$ -D-Neu5Ac-(2→3)- $\beta$ -D-Gal-(1→4)- $\beta$ -D-Glc
	633.21	6'-sialyllactose	$\alpha$ -D-Neu5Ac-(2→6)- $\beta$ -D-Gal-(1→4)- $\beta$ -D-Glc
	634.23	Difucosyllactose	<b><math>\alpha</math>-L-Fuc-(1→2)</b> - $\beta$ -D-Gal-(1→4)-[ <b><math>\alpha</math>-L-Fuc-(1→3)</b> ]- $\beta$ -D-Glc
	707.25	Lacto- <i>N</i> -tetraose	$\beta$ -D-Gal-(1→3)- $\beta$ -D-GlcNAc-(1→3)- $\beta$ -D-Gal-(1→4)- $\beta$ -D-Glc
	707.25	Lacto- <i>N</i> -neotetraose	$\beta$ -D-Gal-(1→4)- $\beta$ -D-GlcNAc-(1→3)- $\beta$ -D-Gal-(1→4)- $\beta$ -D-Glc
	779.27	3'-sialyl-3'-fucosyllactose	$\alpha$ -D-Neu5Ac-(2→3)- $\beta$ -D-Gal-(1→4)-[ <b><math>\alpha</math>-L-Fuc-(1→3)</b> ]- $\beta$ -D-Glc
	853.31	Lacto- <i>N</i> -fucopentaose I	<b><math>\alpha</math>-L-Fuc-(1→2)</b> - $\beta$ -D-Gal-(1→3)- $\beta$ -D-GlcNAc-(1→3)- $\beta$ -D-Gal-(1→4)- $\beta$ -D-Glc
	853.31	Lacto- <i>N</i> -fucopentaose II	$\beta$ -D-Gal-(1→3)-[ <b><math>\alpha</math>-L-Fuc-(1→4)</b> ]- $\beta$ -D-GlcNAc-(1→3)- $\beta$ -D-Gal-(1→4)- $\beta$ -D-Glc
	853.31	Lacto- <i>N</i> -fucopentaose III	$\beta$ -D-Gal-(1→4)-[ <b><math>\alpha</math>-L-Fuc-(1→3)</b> ]- $\beta$ -D-GlcNAc-(1→3)- $\beta$ -D-Gal-(1→4)- $\beta$ -D-Glc
	853.31	Lacto- <i>N</i> -neofucopentaose V	$\beta$ -D-Gal-(1→3)- $\beta$ -D-GlcNAc-(1→3)- $\beta$ -D-Gal-(1→4)-[ <b><math>\alpha</math>-L-Fuc-(1→3)</b> ]- $\beta$ -D-Glc
Medium	853.31	Lacto- <i>N</i> -neofucopentaose	$\beta$ -D-Gal-(1→4)- $\beta$ -D-GlcNAc-(1→3)- $\beta$ -D-Gal-(1→4)[ <b><math>\alpha</math>-L-Fuc-(1→3)</b> ]- $\beta$ -D-Glc
	998.34	Sialyllacto- <i>N</i> -tetraose a	$\alpha$ -D-Neu5Ac-(2→3)- $\beta$ -D-Gal-(1→3)- $\beta$ -D-GlcNAc-(1→3)- $\beta$ -D-Gal-(1→4)- $\beta$ -D-Glc
	998.34	Sialyllacto- <i>N</i> -tetraose b	$\alpha$ -D-Neu5Ac-(2→6)-[ $\beta$ -D-Gal-(1→3)]- $\beta$ -D-GlcNAc-(1→3)- $\beta$ -D-Gal-(1→4)- $\beta$ -D-Glc
	998.34	Sialyllacto- <i>N</i> -tetraose c	$\alpha$ -D-Neu5Ac-(2→6)- $\beta$ -D-Gal-(1→4)- $\beta$ -D-GlcNAc-(1→3)- $\beta$ -D-Gal-(1→4)- $\beta$ -D-Glc
	998.34	Sialyllacto- <i>N</i> -tetraose d	$\alpha$ -D-Neu5Ac-(2→3)- $\beta$ -D-Gal-(1→4)- $\beta$ -D-GlcNAc-(1→3)- $\beta$ -D-Gal-(1→4)- $\beta$ -D-Glc
	999.36	Lacto- <i>N</i> -difucohexaose I	<b><math>\alpha</math>-L-Fuc-(1→2)</b> - $\beta$ -D-Gal-(1→3)-[ <b><math>\alpha</math>-L-Fuc-(1→4)</b> ]- $\beta$ -D-GlcNAc-(1→3)- $\beta$ -D-Gal-(1→4)- $\beta$ -D-Glc
	999.36	Lacto- <i>N</i> -difucohexaose II	$\beta$ -D-Gal-(1→3)-[ <b><math>\alpha</math>-L-Fuc-(1→4)</b> ]- $\beta$ -D-GlcNAc-(1→3)- $\beta$ -D-Gal-(1→4)-[ <b><math>\alpha</math>-L-Fuc-(1→3)</b> ]- $\beta$ -D-Glc
	999.36	Lacto- <i>N</i> -neodifucohexaose	$\beta$ -D-Gal-(1→4)-[ <b><math>\alpha</math>-L-Fuc-(1→3)</b> ]- $\beta$ -D-GlcNAc-(1→3)- $\beta$ -D-Gal-(1→4)-[ <b><math>\alpha</math>-L-Fuc-(1→3)</b> ]- $\beta$ -D-Glc
	545.20	Lacto- <i>N</i> -triose	$\beta$ -D-GlcNAc-(1→3)- $\beta$ -D-Gal(1→4)- $\beta$ -D-Glc

691.25	Blood group A antigen tetraose type 5	$\alpha$ -D-GalNAc-(1→3)-[ $\alpha$ -L-Fuc-(1→2)]- $\beta$ -D-Gal-(1→4)- $\beta$ -D-Glc
674.24	3'-sialyl- <i>N</i> -acetyllactosamine	$\alpha$ -D-Neu5Ac-(2→3)- $\beta$ -D-Gal-(1→4)- $\beta$ -D-GlcNAc
674.24	6'-sialyl- <i>N</i> -acetyllactosamine	$\alpha$ -D-Neu5Ac-(2→6)- $\beta$ -D-Gal-(1→4)- $\beta$ -D-GlcNAc
820.30	3'-sialyl Lewis A	$\alpha$ -D-Neu5Ac-(2→3)- $\beta$ -D-Gal-(1→3)-[ $\alpha$ -L-Fuc-(1→4)]- $\beta$ -D-GlcNAc
1072.38	Para Lacto- <i>N</i> -neohexaose	$\beta$ -D-Gal-(1→4)- $\beta$ -D-GlcNAc-(1→3)- $\beta$ -D-Gal-(1→4)- $\beta$ -D-GlcNAc-(1→3)- $\beta$ -D-Gal-(1→4)- $\beta$ -D-Glc
1072.38	Lacto- <i>N</i> -neohexaose	$\beta$ -D-Gal-(1→4)- $\beta$ -D-GlcNAc-(1→6)-[ $\beta$ -D-Gal-(1→4)- $\beta$ -D-GlcNAc-(1→3)]- $\beta$ -D-Gal-(1→4)- $\beta$ -D-Glc
1144.40	Sialyl monofucosyllacto- <i>N</i> -tetraose	$\alpha$ -D-Neu5Ac-(2→3)- $\beta$ -D-Gal-(1→3)-[ $\alpha$ -L-Fuc-(1→4)]- $\beta$ -D-GlcNAc-(1→3)- $\beta$ -D-Gal-(1→4)- $\beta$ -D-Glc
1144.40	Sialyl-lacto- <i>N</i> -fucopentaose V	$\alpha$ -L-Fuc-(1→2)- $\beta$ -D-Gal-(1→3)-[ $\alpha$ -D-Neu5Ac-(2→6)]- $\beta$ -D-GlcNAc-(1→3)- $\beta$ -D-Gal-(1→4)- $\beta$ -D-Glc
1289.44	Disialyllacto- <i>N</i> -tetraose	$\alpha$ -D-Neu5Ac-(2→3)- $\beta$ -D-Gal-(1→3)-[ $\alpha$ -D-Neu5Ac-(2→6)]- $\beta$ -D-GlcNAc-(1→3)- $\beta$ -D-Gal-(1→4)- $\beta$ -D-Glc
1364.50	Difucosyllacto- <i>N</i> -hexaose a	$\beta$ -D-Gal-(1→4)-[ $\alpha$ -L-Fuc-(1→3)]- $\beta$ -D-GlcNAc-(1→6)-[ $\alpha$ -L-Fuc-(1→2)]- $\beta$ -D-Gal-(1→3)- $\beta$ -D-GlcNAc-(1→3)]- $\beta$ -D-Gal-(1→4)- $\beta$ -D-Glc
1364.50	Difucosyl-para-lacto- <i>N</i> -hexaose II	$\beta$ -D-Gal-(1→3)-[ $\alpha$ -L-Fuc-(1→4)]- $\beta$ -D-GlcNAc-(1→3)- $\beta$ -D-Gal-(1→4)-[ $\alpha$ -L-Fuc-(1→3)]- $\beta$ -D-GlcNAc-(1→3)- $\beta$ -D-Gal-(1→4)- $\beta$ -D-Glc
1437.51	Lacto- <i>N</i> -neooctaose	$\beta$ -D-Gal-(1→4)- $\beta$ -D-GlcNAc-(1→3)- $\beta$ -D-Gal-(1→4)- $\beta$ -D-GlcNAc-(1→3)- $\beta$ -D-Gal-(1→4)- $\beta$ -D-GlcNAc-(1→3)- $\beta$ -D-Gal-(1→4)- $\beta$ -D-Glc
1056.39	Blood group A antigen hexaose type 1	$\alpha$ -D-GalNAc-(1→3)-[ $\alpha$ -L-Fuc-(1→2)]- $\beta$ -D-Gal-(1→3)- $\beta$ -D-GlcNAc-(1→3)- $\beta$ -D-Gal-(1→4)- $\beta$ -D-Glc
1202.44	A-hepta saccharide	$\alpha$ -D-GalNAc-(1→3)-[ $\alpha$ -L-Fuc-(1→2)]- $\beta$ -D-Gal-(1→3)-[ $\alpha$ -L-Fuc-(1→4)]- $\beta$ -D-GlcNAc-(1→3)- $\beta$ -D-Gal-(1→4)- $\beta$ -D-Glc
1218.44	Monofucosyllacto- <i>N</i> -hexaose III	$\beta$ -D-Gal-(1→4)-[ $\alpha$ -L-Fuc-(1→3)]- $\beta$ -D-GlcNAc-(1→6)-[ $\beta$ -D-Gal-(1→3)- $\beta$ -D-GlcNAc-(1→3)]- $\beta$ -D-Gal-(1→4)- $\beta$ -D-Glc
1364.50	Difucosyllacto- <i>N</i> -	$\beta$ -D-Gal-(1→4)-[ $\alpha$ -L-Fuc-(1→3)]- $\beta$ -D-

Low/no binding

	hexaose b	GlcNAc-(1→6)-[β-D-Gal-(1→3)-[α-L-Fuc-(1→4)]-β-D-GlcNAc-(1→3)]-β-D-Gal-(1→4)-β-D-Glc
1364.50	Difucosyl-paralacto- <i>N</i> -neohexaose	β-D-Gal-(1→4)-[α-L-Fuc-(1→3)]-β-D-GlcNAc-(1→3)-β-D-Gal-(1→4)-[α-L-Fuc-(1→3)]-D-GlcNAc-(1→3)]-β-D-Gal-(1→4)-β-D-Glc
1072.38	Para Lacto- <i>N</i> -hexaose	β-D-Gal-(1→3)-β-D-GlcNAc-(1→3)-β-D-Gal-(1→4)-β-D-GlcNAc-(1→3)-β-D-Gal-(1→4)-β-D-Glc
1510.55	Trifucosyllacto- <i>N</i> -hexaose a	β-D-Gal-(1→4)-[α-L-Fuc-(1→3)]-β-D-GlcNAc-(1→6)-[α-L-Fuc-(1→2)-β-D-Gal-(1→3)-[α-L-Fuc-(1→4)]-β-D-GlcNAc-(1→3)]-β-D-Gal-(1→4)-β-D-Glc

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