

Supplementary table 5 - *B.bifidum* HMOs and mucin degradation genes

Gene	Function	Publication
<i>InbB</i>	HMO degradation	Biosidase, a Critical Enzyme for the Degradation of Human Milk Oligosaccharides with a Type 1 Structure. <i>Applied and Environmental Microbiology</i> <b>74</b> , 3996-4004 (2008).
<i>afcB, AfcA</i>		Two distinct $\alpha$ -l-fucosidases from Bifidobacterium bifidum are essential for the utilization of fucosylated milk oligosaccharides and glycoconjugates. <i>Glycobiology</i> <b>19</b> , 1010-1017 (2009)
<i>BbhI, BbgIII</i>		Cooperation of $\beta$ -galactosidase and $\beta$ -N-acetylhexosaminidase from bifidobacteria in assimilation of human milk oligosaccharides with type 2 structure. <i>Glycobiology</i> <b>20</b> , 1402-1409 (2010)
<i>Siabb2</i>		Extracellular Sialidase Enhances Adhesion to the Mucosal Surface and Supports Carbohydrate Assimilation. <i>mBio</i> <b>8</b> , e00928-00917 (2017).
BBPR_0193,	Mucin degradation genes	Genome analysis of Bifidobacterium bifidum PRL2010 reveals metabolic pathways for host-derived glycan foraging. <i>Proc Natl Acad Sci U S A</i> <b>107</b> , 19514-19519 (2010)
BBPR_1360		
BBPR_1793		
BBPR_0482		
BBPR_0264		
BBPR_1514		
BBPR_1018		