

## A Highly Active Endo-Levanase BT1760 of a Dominant Mammalian Gut Commensal *Bacteroides thetaiotaomicron* Cleaves Not Only Various Bacterial Levans, but Also Levan of Timothy Grass

S1 Table. Accession numbers of protein and gene sequences analysed in current work

Protein (locus) designation	Protein (locus) characterization	Microorganism	Accession No	
			UniProtKB	GenBank
Lsc3 (Lsc-3)	Levansucrase <sup>#</sup>	<i>Pseudomonas syringae</i> pv. tomato DC3000	<a href="#">Q88BN6</a>	AAO59056.1
BT1760	Endo-levanase*	<i>Bacteroides thetaiotaomicron</i> VPI-5482	<a href="#">Q8A6W6</a>	AAO76867.1
BT1754	Hybrid two-component sensing and regulatory system (HTCS)*	<i>Bacteroides thetaiotaomicron</i> VPI-5482	<a href="#">Q8A6X1</a>	AAO76861.1
BT1757	Fructokinase*	<i>Bacteroides thetaiotaomicron</i> VPI-5482	<a href="#">Q8A6W9</a>	AAO76864.1
BT1758	Inner membrane monosaccharide importer*	<i>Bacteroides thetaiotaomicron</i> VPI-5482	<a href="#">Q8A6W8</a>	AAO76865.1
BT1759	Exo-acting fructanase*	<i>Bacteroides thetaiotaomicron</i> VPI-5482	<a href="#">Q8A6W7</a>	AAO76866.1
BT1761	Protein specifically binding levan*	<i>Bacteroides thetaiotaomicron</i> VPI-5482	<a href="#">Q8A6W5</a>	AAO76868.1
BT1762	Levan-specific SusD homologue*	<i>Bacteroides thetaiotaomicron</i> VPI-5482	<a href="#">Q8A6W4</a>	AAO76869.1
BT1763	SusC homologue*	<i>Bacteroides thetaiotaomicron</i> VPI-5482	<a href="#">Q8A6W3</a>	AAO76870.1
BT1765	Exo-acting fructanase*	<i>Bacteroides thetaiotaomicron</i> VPI-5482	<a href="#">Q8A6W1</a>	AAO76872.1
BT3082	Exo-acting fructanase*	<i>Bacteroides thetaiotaomicron</i> VPI-5482	<a href="#">Q8A373</a>	AAO78188.1
Genomic region (76953-98008 nt, reverse); supercontig 1.5, whole genome shotgun sequence	Putative fructan PUL	<i>Bacteroides xylanisolvens</i> CL03T12C04		<a href="#">NZ_JH724298.1</a>
HMPREF1074_04233	Homologous to BT1760	<i>Bacteroides xylanisolvens</i> CL03T12C04	<a href="#">I9UP90</a>	EIY84278.1
HMPREF1074_04239	Homologous to BT1754	<i>Bacteroides xylanisolvens</i> CL03T12C04	<a href="#">I9JCE0</a>	EIY84284.1
HMPREF1074_04236	Homologous to BT1757	<i>Bacteroides xylanisolvens</i> CL03T12C04	<a href="#">I9UNP0</a>	EIY84281.1
HMPREF1074_04235	Homologous to BT1758	<i>Bacteroides xylanisolvens</i> CL03T12C04	<a href="#">I9A953</a>	EIY84280.1
HMPREF1074_04234	Homologous to BT1759	<i>Bacteroides xylanisolvens</i> CL03T12C04	<a href="#">I9JCD5</a>	EIY84279.1
HMPREF1074_04232	Homologous to BT1761	<i>Bacteroides xylanisolvens</i> CL03T12C04	<a href="#">I9AAC9</a>	EIY84277.1
HMPREF1074_04231	Homologous to BT1762	<i>Bacteroides xylanisolvens</i> CL03T12C04	<a href="#">I9UNN7</a>	EIY84276.1
HMPREF1074_04230	Homologous to BT1763	<i>Bacteroides xylanisolvens</i> CL03T12C04	<a href="#">I9A947</a>	EIY84275.1
HMPREF1074_04228	Homologous to BT1765	<i>Bacteroides xylanisolvens</i> CL03T12C04	<a href="#">I9UP85</a>	EIY84273.1
LevB1	Endo-levanase	<i>Bacillus licheniformis</i> strain IBT-ALM	<a href="#">W8GV60</a>	AHK25455.1
LevB	Endo-levanase	<i>Bacillus subtilis</i> 168	<a href="#">O07003</a>	CAB15451.1
	Endo-levanase	<i>Butyrivibrio fibrisolvens</i> 16/4	<a href="#">D4IW69</a>	CBK75012.1
INU2	Endo-inulinase	<i>Aspergillus ficuum</i>	<a href="#">O94220</a>	AJ006951.1

<sup>#</sup>Characterized in refs [22,40 and 45] of the main text.

\*Function addressed in Sonnenburg et al. (2010), ref [7] of the main text.