

**S2 Table. Best tBlastn results for H11G11- and C7D2- transporters in microbiomes of CD patients, first degree relatives and healthy subjects.**

Microbiome source	Database disease status	Template H11G11 (healthy) C7D2 (CD)	C7D2 (CD) homology (identity%)	H11G11 (Healthy) homology (identity%)	Best Blastp result with identified strain (identity%)	Name given (template-microbiome)
F1-S	Healthy	H11G11 C7D2	27 52	33 30	<i>gi160943280 Faecalibacterium prausnitzii M21/2 (99%)</i> <i>gi238874027 Eubacterium eligens ATCC 27750 plasmid (90%)</i>	H11G11 F1S C7D2 F1S
F2-V	Healthy	C7D2	30	29	<i>gi182624781 Clostridium perfringens D str. JGS1721 (42%)</i>	C7D2 F2V
F2-W	Healthy	H11G11/C7D2	30	100	<i>gi154505099 Ruminococcus gnavus ATCC 29149 (44%)</i>	H11G11/C7D2 F2W
In-D	Healthy	H11G11 /C7D2	23	23	<i>gi189459801 Bacteroides coprocola DSM 17136 (99%)</i>	C7D2/H11G11 InD
In-R	Healthy	H11G11	27	34	<i>gi 291534767 Roseburia intestinalis M50/1 (99%)</i>	H11G11 InR
MH0001	Healthy	H11G11 /C7D2	25	25	<i>gi153813566 Ruminococcus obeum ATCC 29174 (73%)</i>	H11G11/C7D2 MH1
MH0002	Healthy	H11G11	21	25	<i>gi269959236 Vibrio harveyi 1DA3 (31%)</i>	H11G11 MH2
MH0003	Healthy	H11G11	26	87	<i>gi154505099 Ruminococcus gnavus ATCC 29149 (44%)</i>	H11G11 MH3
MH0004	Healthy	H11G11	26	27	<i>gi291524604 Eubacterium rectale DSM 17629 (100%)</i>	H11G11 MH4
MH0005	Healthy	H11G11/ C7D2	24	25	<i>gi153813566 Ruminococcus obeum ATCC 29174 (72%)</i>	H11G11/C7D2 MH5
MH0006	Healthy	H11G11 C7D2	26 70	87 29	<i>gi154505099 Ruminococcus gnavus ATCC 29149 (44%)</i> <i>gi257438598 Faecalibacterium prausnitzii A2-165 (99%)</i>	H11G11 MH6 C7D2 MH6
MH0007	Healthy	H11G11 /C7D2	27	33	<i>gi 291534767 Roseburia intestinalis M50/1 (99%)</i>	C7D2/ H11G11 MH7
MH0008	Healthy	H11G11 /C7D2	32	46	<i>gi260589235 Blautia hansenii DSM 20583 (58%)</i>	H11G11 /C7D2 MH8
MH0009	Healthy	H11G11 /C7D2	28	100	<i>gi154505099 Ruminococcus gnavus ATCC 29149 (45%)</i>	H11G11/C7D2 MH9
MH0010	Healthy	C7D2	33	29	<i>gi257413542 Roseburia intestinalis L1-82 (100%)</i>	C7D2/H11G11 MH10
MH0011	Healthy	C7D2	69	29	<i>gi257438598 Faecalibacterium prausnitzii A2-165 (99%)</i>	C7D2 MH11
MH0012	Healthy	H11G11 C7D2	28 52	100 29	<i>gi154505099 Ruminococcus gnavus ATCC 29149 (44%)</i> <i>gi238874027 Eubacterium eligens ATCC 27750 plasmid (99%)</i>	H11G11 MH12 C7D2 MH12
<u>V1-UC6</u>	Healthy	H11G11/ C7D2	45	30	<i>gi347533214 Roseburia hominis A2-183 (100%)</i>	C7D2 /H11G11 UC6
<u>V1-UC7</u>	Healthy	H11G11/ C7D2	27	29	<i>gi494990662 Clostridium asparagiforme (85%)</i>	H11G11/ C7D2 UC7
<u>V1-UC8</u>	Healthy	H11G11/ C7D2	28	99	<i>gi547236978 Eubacterium sp. CAG:180 (99%)</i>	H11G11/ C7D2 UC8
<u>V1-UC9</u>	Healthy	H11G11/ C7D2	45	30	<i>gi548310806 Roseburia hominis A2-183 (58%)</i>	C7D2 /H11G11 UC9
<u>V1-UC18</u>	Healthy	H11G11 C7D2	27 30	26 22	<i>gi547465828 Roseburia sp. CAG:197 (95%)</i> <i>gi479208413 Faecalibacterium prausnitzii L2-6 (98%)</i>	H11G11 UC18 C7D2 UC18
<u>V1-UC19</u>	Healthy	H11G11/ C7D2	29	28	<i>gi479149068 Roseburia intestinalis XB6B4 (100%)</i>	C7D2/H11G11 UC19
<u>V1-CD13</u>	CD-FR	C7D2	52	29	<i>gi238874027 Eubacterium eligens ATCC 27750 plasmid (99%)</i>	C7D2 CD13
<u>V1-CD-2</u>	CD-FR	C7D2	48*	34*		
<u>V1-CD-3</u>	CD-FR	H11G11	27	36	<i>gi154505099 Ruminococcus gnavus ATCC 29149 (42%)</i>	H11G11 CD3
<u>V1-CD-4</u>	CD-FR	C7D2	48	33	<i>gi261366220 Subdoligranulum variabile DSM 15176 (66%)</i>	C7D2/H11G11 CD4
<u>V1-CD-8</u>	CD-FR	H11G11 C7D2	26 52	87 30	<i>gi154505099 Ruminococcus gnavus ATCC 29149 (44%)</i> <i>gi238874027 Eubacterium eligens ATCC 27750 plasmid (99%)</i>	H11G11 CD8 C7D2 CD8
<u>V1-CD-9</u>	CD-FR	C7D2	53	30	<i>gi238874027 Eubacterium eligens ATCC 27750 plasmid (99%)</i>	C7D2 CD9
<u>V1-CD-11</u>	CD-FR	C7D2	37	29	<i>gi237737733 Fusobacterium mortiferum ATCC 9817 (100%)</i>	C7D2 CD11
<u>V1-CD-14</u>	CD-FR	C7D2	52	30	<i>gi238874027 Eubacterium eligens ATCC 27750 plasmid (99%)</i>	C7D2 CD14
<u>V1-CD-1</u>	CD	H11G11 C7D2	27 52	33 29	<i>gi160943280 Faecalibacterium prausnitzii M21/2 (99%)</i> <i>gi238874027 Eubacterium eligens ATCC 27750 plasmid (99%)</i>	H11G11 CD1 C7D2 CD1
<u>V1-CD-6</u>	CD	C7D2	52	30	<i>gi238874027 Eubacterium eligens ATCC 27750 plasmid (99%)</i>	C7D2 CD6
<u>V1-CD-12</u>	CD	H11G11 C7D2	28 92	31 31	<i>gi 291534591 Roseburia intestinalis M50/1 (80%)</i> <i>gi154503147 Ruminococcus gnavus ATCC 29149 (83%)</i>	H11G11 CD12 C7D2 CD12
<u>V1-CD-15</u>	CD	C7D2	63	31	<i>gi257438598 Faecalibacterium prausnitzii A2-165 (75%)</i>	C7D2 CD15
<b>Template H11G11-transporter</b>			<b>29</b>	<b>100</b>	<i>gi154505099 Ruminococcus gnavus ATCC 29149 (44%)</i>	
<b>Template C7D2-transporter</b>			<b>100</b>	<b>29</b>	<i>gi154505099 Ruminococcus gnavus ATCC 29149 (83%)</i>	

Spanish subjects are underlined. They include both CD-related families and healthy subjects (CD-unrelated). \*: truncated sequences (<150 amino acids).