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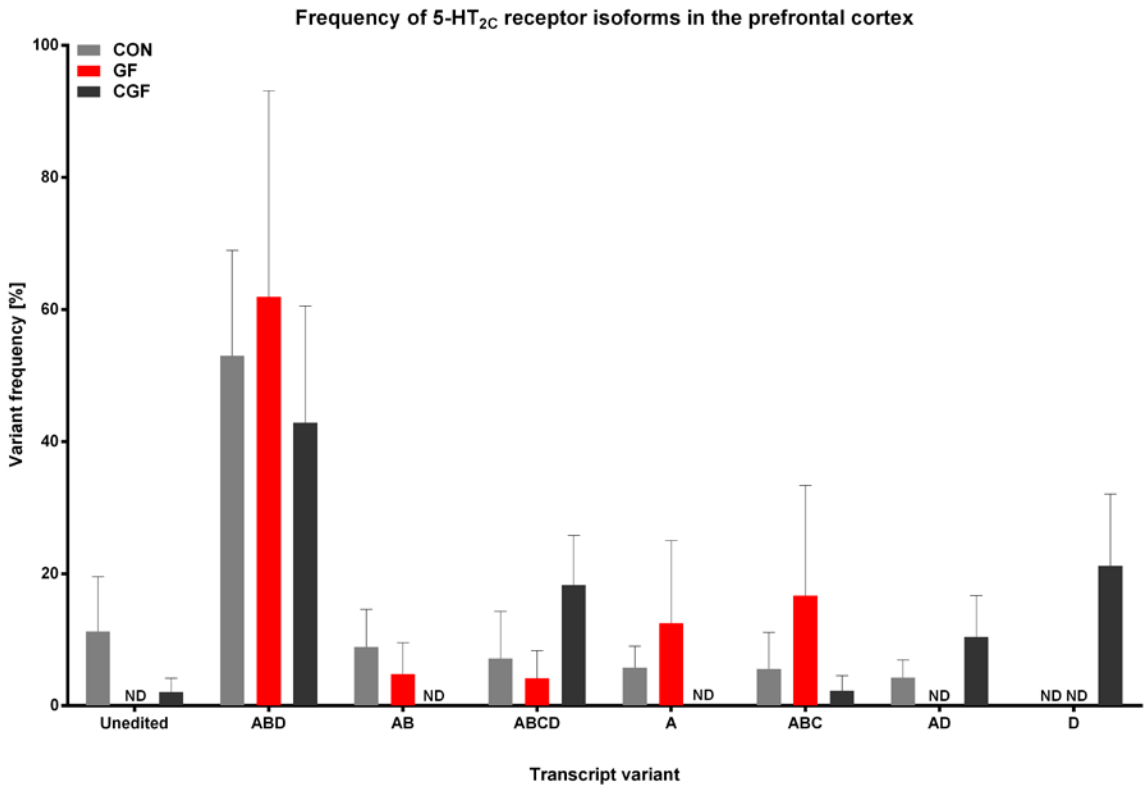
Supporting information

Host Microbiota Regulates Central Nervous System Serotonin Receptor 2C Editing in Rodents

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sFigure 1. 5-HT$_{2C}$ receptor transcript variants in the prefrontal cortex. The prefrontal cortex of mice with a conventional microbiota (CON), mice without a microbiota (GF) and mice of which the microbiota was colonized (CGF), were investigated using RNA sequencing, after which the relative frequency of 5-HT2C receptor transcript variants was assessed. Notably, the 5-HT$_{2C}$ receptor is not as highly expressed in the prefrontal cortex as the amygdala. As such, the sequencing depth of the 5-HT$_{2C}$ receptor and its isoforms was not as high, and these findings need to be interpreted with care. Only transcript variants are depicted of which relative frequency was higher than 1%. All data are expressed as mean ± SEM (n = 3-4).

sTable 1. Relative occurrence of 5-HT$_{2C}$ isoforms compared to previous work investigating 5-HT$_{2C}$ editing in the hypothalamus of C57Bl/6 mice showing similar editing patterns (Schellekens et al. 2012).

Rank	Relative occurrence in CON, Amygdala, Swiss-Webster	Edited sites / Isoform	Sequence of edited cassette as seen in RNA-seq data	% Relative occurence Schellekens et al. 2012
1	33.66%	ABD	GTGCGTAATCCTG	33.58%
2	13.81%	ABCD	GTGCGTAGTCCTG	11.32%
3	11.53%	AB	GTGCGTAATCCTA	19.31%
4	9.50%	ABC	GTGCGTAGTCCTA	8.82%
5	8.45%	(unedited)	ATACGTAATCCTA	6.24%
6	5.43%	A	GTACGTAATCCTA	8.68%
7	4.17%	AD	GTACGTAATCCTG	<1%
8	3.36%	D	ATACGTAATCCTG	2.66%
9	2.61%	ACD	GTACGTAGTCCTG	<1%
10	1.86%	CD	ATACGTAGTCCTG	<1%
11	<1%	AC	GTACGTAGTCCTA	1.11%
11	<1%	AE	GTACGTGATCCTA	<1%
11	<1%	C	ATACGTAGTCCTA	<1%
11	<1%	DE	ATACGTGATCCTG	<1%
11	<1%	ABCDE	GTGCGTGGTCCTG	<1%
11	<1%	ABCE	GTGCGTGGTCCTA	<1%
11	<1%	ABDE	GTGCGTGATCCTG	<1%
11	<1%	ABE	GTGCGTGATCCTA	<1%
11	<1%	ACDE	GTGCGTGGTCCTA	<1%
11	<1%	ACE	GTACGTGGTCCTA	<1%
11	<1%	ADE	GTACGTGATCCTG	<1%
11	<1%	B	ATGCGTAATCCTA	<1%
11	<1%	BC	ATGCGTAGTCCTA	<1%
11	<1%	BCD	ATGCGTAGTCCTG	<1%
11	<1%	BCDE	ATGCGTGGTCCTG	<1%
11	<1%	BD	ATGCGTAATCCTG	<1%
11	<1%	BDE	ATGCGTGATCCTG	<1%
11	<1%	BE	ATGCGTGATCCTA	<1%
11	<1%	BCE	ATGCGTGGTCCTA	<1%
11	<1%	CDE	ATACGTGGTCCTG	<1%
11	<1%	CE	ATACGTGGTCCTA	<1%
11	<1%	E	ATACGTGATCCTA	<1%