

1 **Supplementary materials**

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3 **Fig. S1. Timeline depicting the various steps in the *in vivo* fecal microbiota**
4 **transplantation (FMT) experiment.** Experimental timeline for FMT from the time of
5 induction of atopic dermatitis using ovalbumin (OVA) sensitization in mice to analysis.

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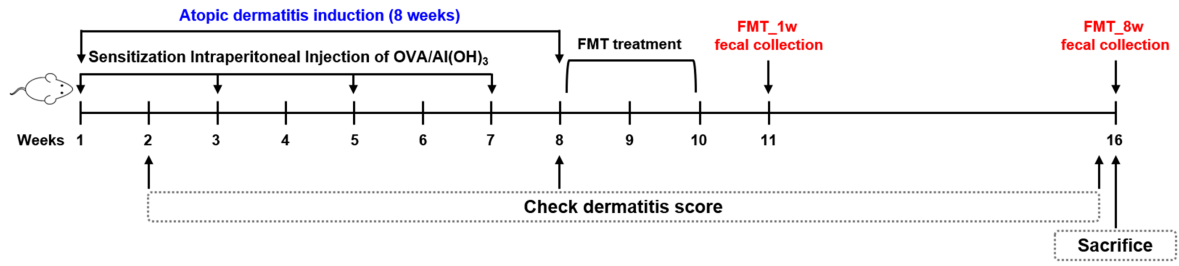
7 **Fig. S2. Taxa level abundance of bacterial taxa in the gut microbiota.** The boxplots reveal
8 significant differences in the relative abundance of bacteria (a) phylum, (b) family, and (c)
9 genus among the four experimental groups.

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11 **Fig. S3. The heatmap of the top 70 bacterial taxa at genus level based on operational**
12 **taxonomic units (OTUs).** The heatmap reveals increased abundance of *Bacteroidaceae*,
13 *Lactobacillaceae*, *Odoribacteraceae*, and *Rikenellaceae* families in the Donor, FMT_1w, and
14 FMT_8w groups compared with that in the Before_FMT group.

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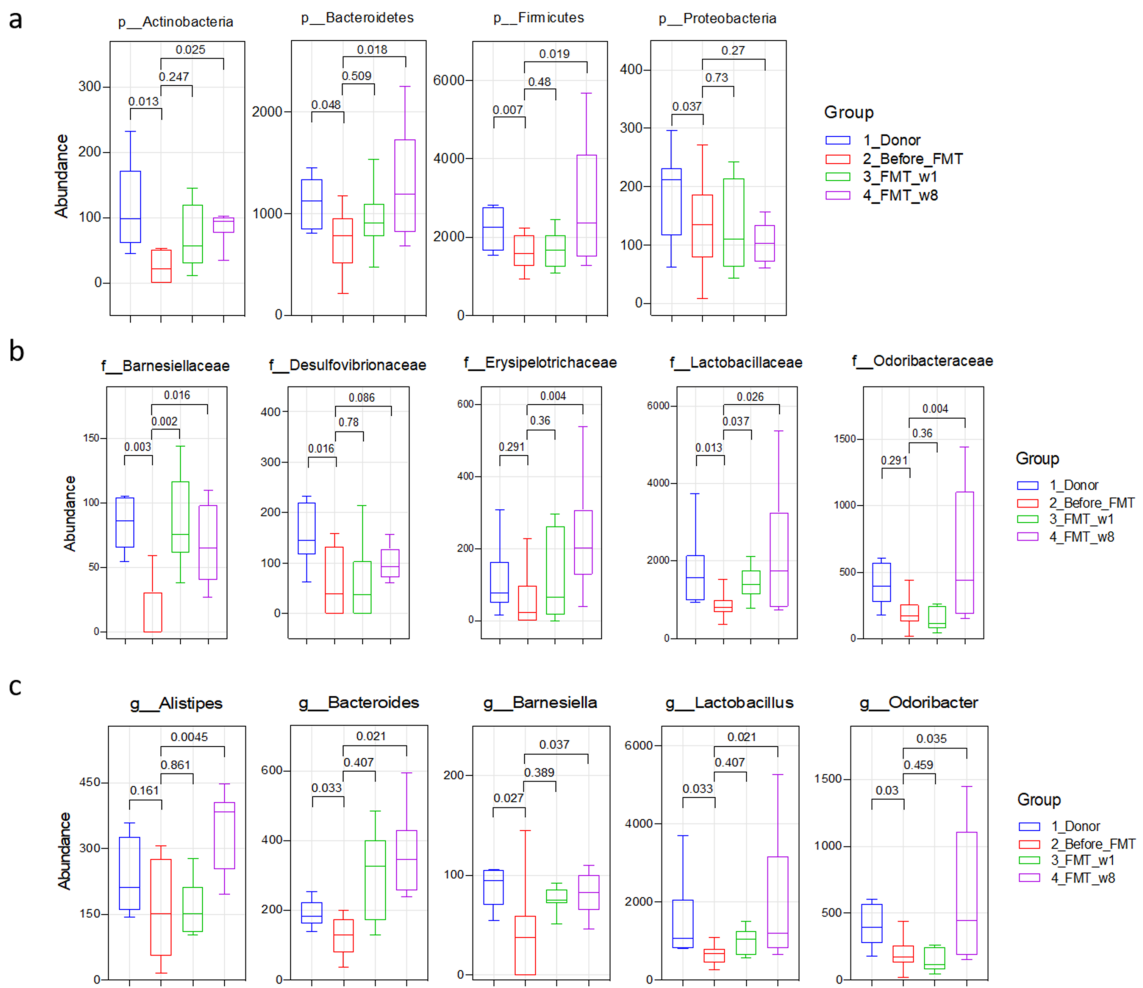
16 **Fig. S1.**



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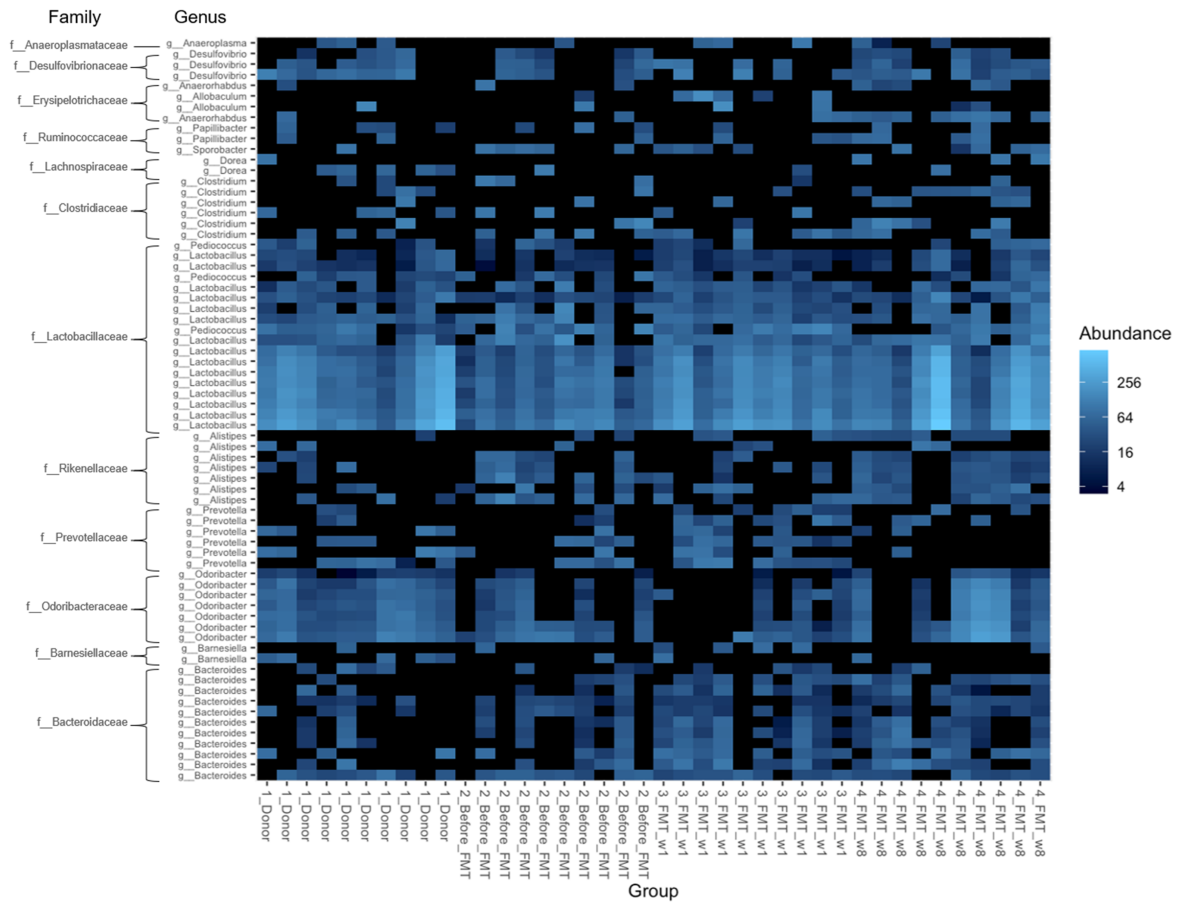
19 **Fig. S2.**



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22 **Fig. S3.**



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