Supplementary figures

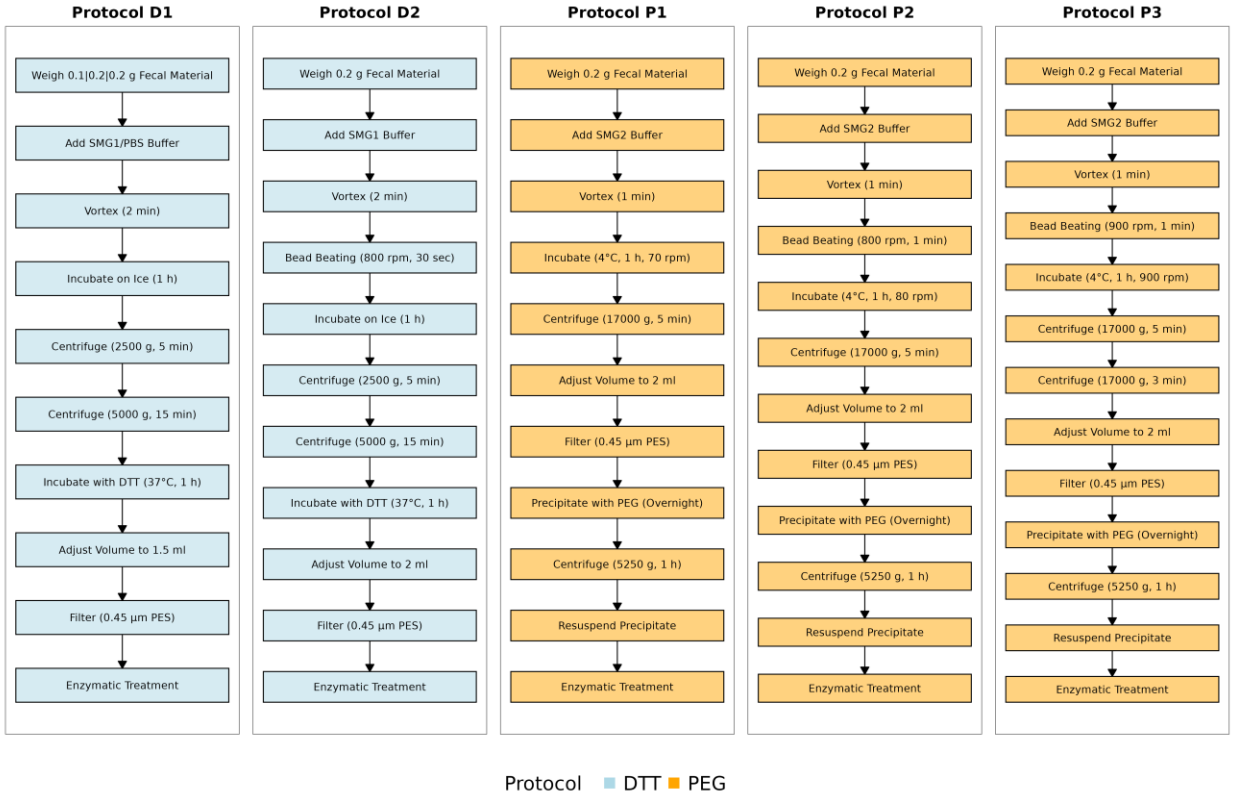

Figure S1. Flowchart of protocols for viral DNA extraction using the DTT (protocol 1 & 3) and PEG methods (protocol 2, 4 & 5). The process begins with weighing the fecal material, followed by a series of buffer additions, vortexing, and incubations. Key steps include dual centrifugation, DTT/PEG treatment, volume adjustment, filtrations, and DNase I treatment.

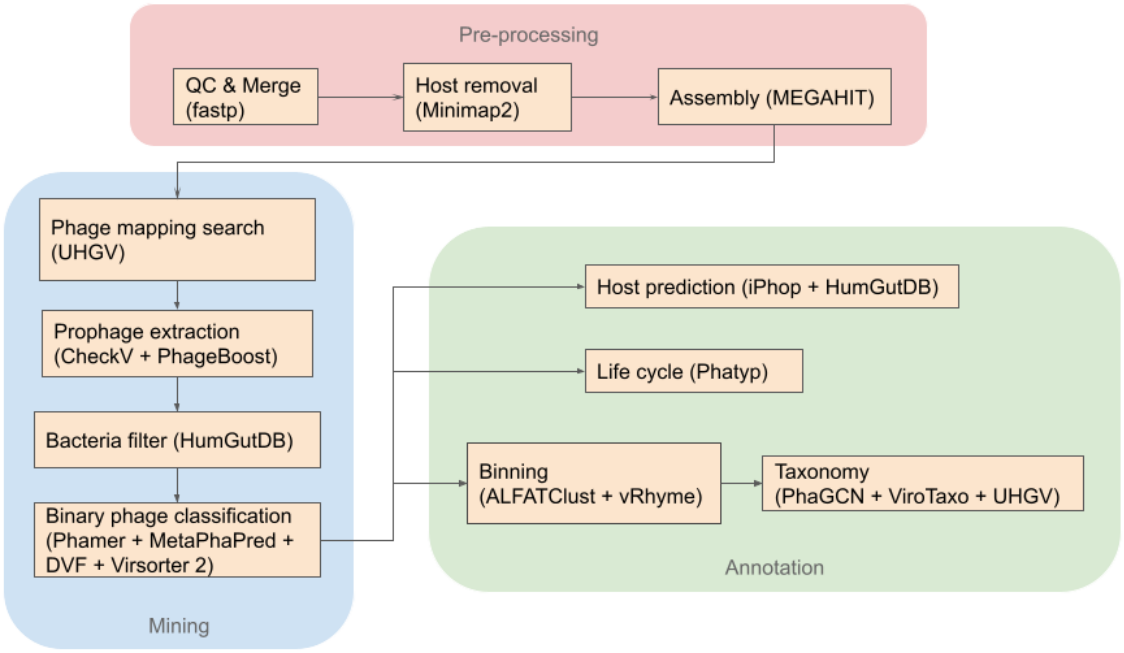

Figure S2. Bioinformatic protocol with focus on phage identification and quantification starting from raw reads, three rounds of phage classification, double binning, and different annotation levels (host, taxonomy, lifecycle and phage activity).

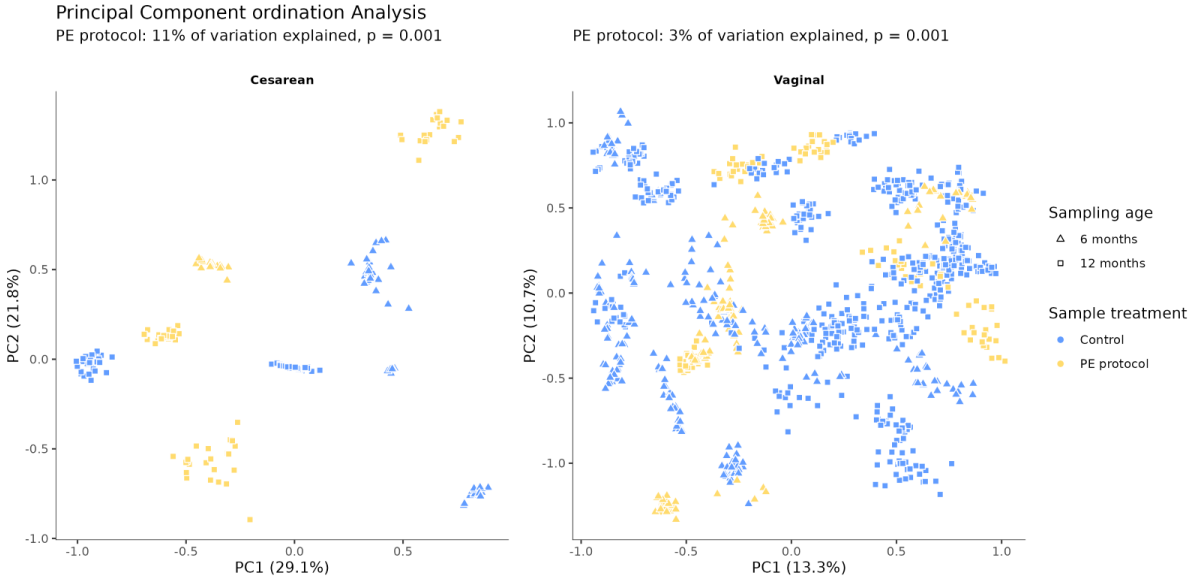

Figure S3: Principal coordinates analysis of samples (using Pearson distance). Analysis was performed using the log-transformed relative units of phages at family. Blue points represent control samples while yellow points are protocol treated samples. Triangle

shaped points represent 6-months-old infant samples and square points indicate 12-months-old samples.

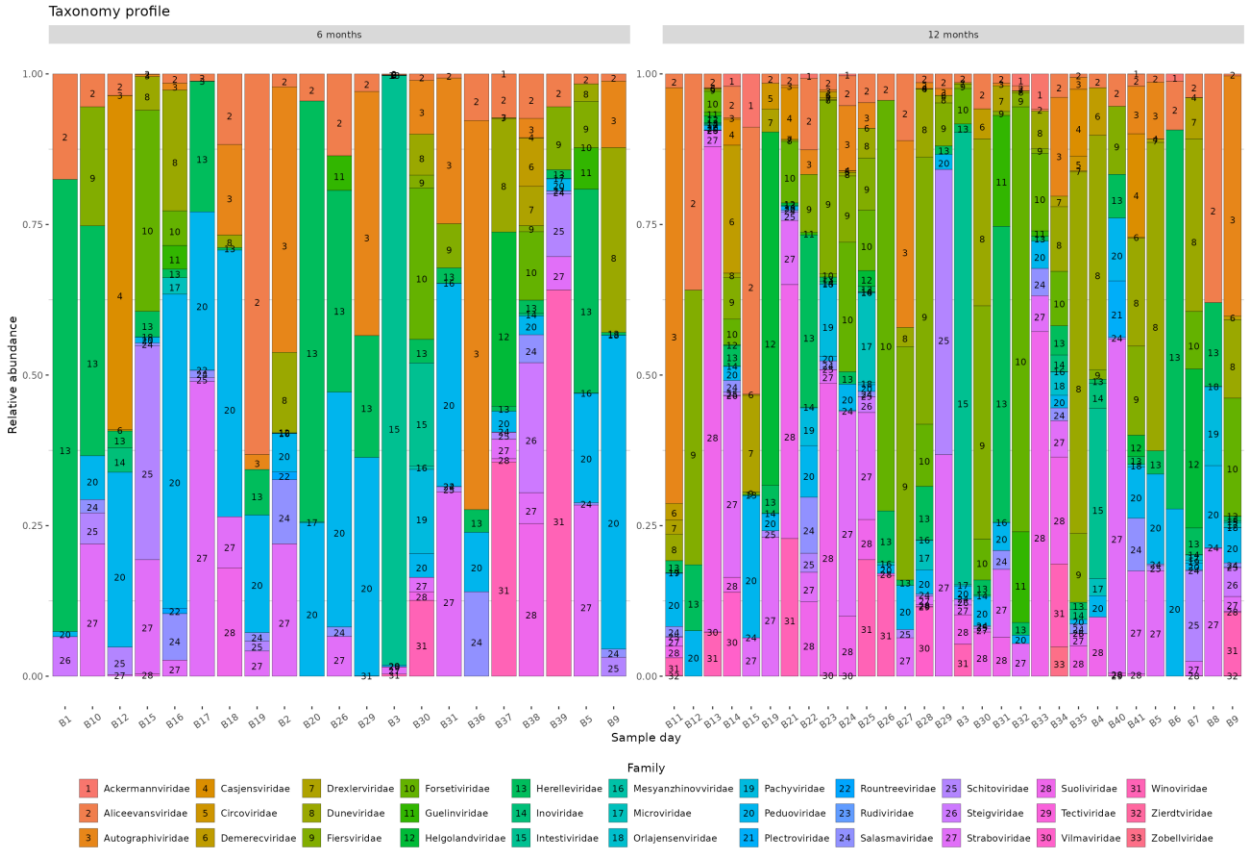

Figure S4: Taxonomic profiles by Baby ID and age. The profiles were generated by averaging the daily phageome at family level for each infant and rescaling the values from 0 to 1 for better visualization. Additionally, phage family ID numbers were assigned to help track the corresponding colors of each phage family.