

ZymoBIOMICS® Spike-in Control I (High Microbial Load)

ZymoBIOMICS® Spike-in Control I is a whole-cell exogenous control that enables absolute quantification of microbiome samples using Next-Gen Sequencing.

- **Absolute Quantification:** Enables cell number measurements using Next-Gen Sequencing.
- **In situ Quality Control:** Ensures each sample is quantified accurately.
- **Unique composition:** Comprised of two microbes alien to the human microbiome.



Add ZymoBIOMICS® Spike-in Control I to sample



DNA Extraction
Library Preparation
Next-Gen Sequencing

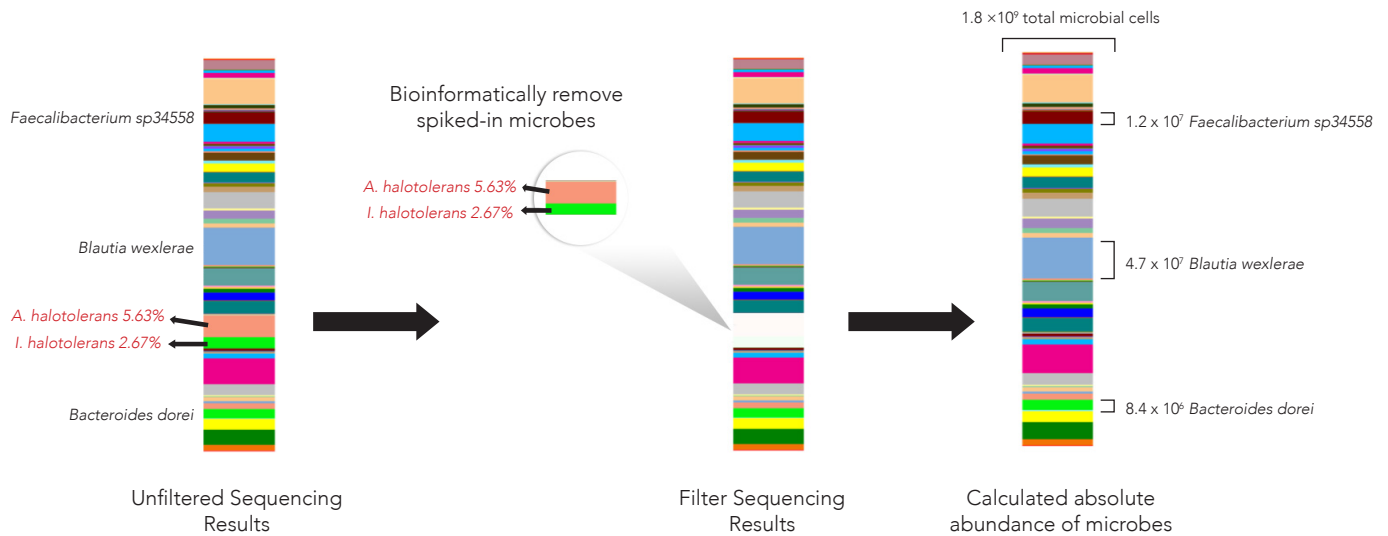


Bioinformatic analysis to measure absolute microbial abundance

Defined Composition

Spike-in Species	Per Prep (20 µl)		
	Cells	16S Copies	Total DNA (ng)
<i>Imtechella halotolerans</i>	2×10^7	6.0×10^7	67.2
<i>Allobacillus halotolerans</i>	2×10^7	1.4×10^8	58.2

Quantify Absolute Abundance of Microbes



The ZymoBIOMICS® Spike-in Control I was added to a fecal sample. Total DNA was then extracted using the ZymoBIOMICS® DNA Miniprep Kit, a library was prepared and then analyzed by 16S targeted Next-Gen Sequencing. From the resulting data, the percentage of *Imtechella halotolerans* and *Allobacillus halotolerans* in the total sample composition was then calculated. The resulting percentage was paired to the defined Spike-in I cell input and used to calculate the absolute abundance for organisms in the sample based their sample composition percentages.

Product	Cat. No.	Size
ZymoBIOMICS® Spike-in Control I (High Microbial Load)	D6320 D6320-10	25 preps 250 preps

