

Figure S1. 2-D gel analysis of HLZ transgenic and non-transgenic control goat milk. Composite image of milk from individual HLZ transgenic and non-transgenic control goats at peak lactation used for quantification and identification of proteins. Boxed ID numbers indicate spots chosen for mass spectrometry.

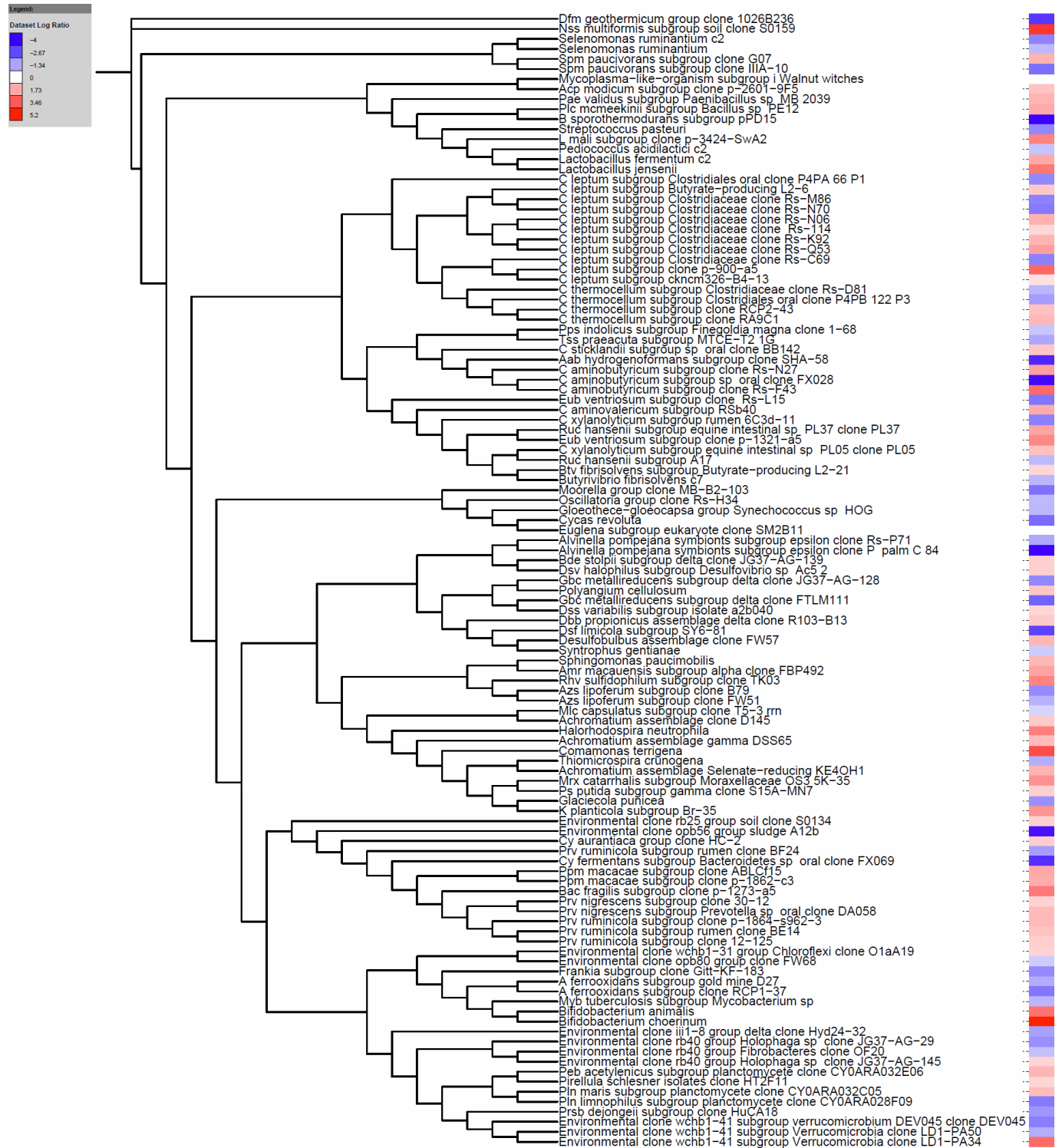


Figure S2. Log₂ ratios of all significantly different OTUs ($q \leq 0.05$) between control and HLZ fed pigs at day 17 as determined by the Phylochip. The tree was constructed using RaxML and iTOL.

Table S1. Significant differences in OTUs at the family level determined by G2 Phylochip analysis after 14 days of HLZ milk consumption

Phyla	OTUs enriched by HLZ milk	OTUs reduced by HLZ milk
<i>Actinobacteria</i>	<i>Bifidobacteriaceae</i> <i>Kineosporiaceae</i>	<i>Actinobacteria</i> (class) <i>Acidothermaceae</i> <i>Coriobacteriaceae</i> <i>Corynebacteriaceae</i> <i>Mycobacteriaceae</i> <i>Rubrobacteraceae</i>
<i>Bacteroidetes</i>	<i>Bacteroidetes</i> (phyla) <i>Bacteroidaceae</i> <i>Flexibacteraceae</i> <i>Porphyromonadaceae</i> <i>Prevotellaceae</i>	
<i>Firmicutes</i>	<i>Paenibacillaceae</i> <i>Aerococcaceae</i> <i>Lactobacillaceae</i> <i>Clostridiaceae</i> <i>Lachnospiraceae</i> <i>Syntrophomonadaceae</i> <i>Acholeplasmataceae</i> <i>Erysipelotrichaceae</i> <i>Entomoplasmataceae</i>	<i>Firmicutes</i> (phyla) <i>Clostridiales</i> (order) <i>Clostridia</i> (class) <i>Bacillaceae</i> <i>Enterococcaceae</i> <i>Streptococcaceae</i> <i>Peptococc/Acidaminococc</i> <i>Peptostreptococcaceae</i>
<i>Proteobacteria</i>	<i>Betaproteobacteria</i> (class) <i>Gammaproteobacteria</i> (class) <i>Sphingomonadaceae</i> <i>Comamonadaceae</i> <i>Bdellovibrionaceae</i> <i>Desulfobacteraceae</i> <i>Desulfobulbaceae</i> <i>Desulfovibrionaceae</i> <i>Polyangiaceae</i> <i>Ectothiorhodospiraceae</i> <i>Enterobacteriaceae</i> <i>Pseudomonadaceae</i> <i>Francisellaceae</i> <i>Vibrionaceae</i>	<i>Deltaproteobacteria</i> (class) <i>Hyphomicrobiaceae</i> <i>Methylobacteriaceae</i> <i>Rhodobacteraceae</i> <i>Burkholderiaceae</i> <i>Oxalobacteraceae</i> <i>Geobacteraceae</i> <i>Syntrophaceae</i> <i>Syntrophobacteraceae</i> <i>Helicobacteraceae</i> <i>Campylobacterales</i> (order) <i>Aeromonadaceae</i> <i>Piscirickettsiaceae</i>
<i>Spirochaetes</i>	<i>Spirochaetaceae</i>	
<i>Verrucomicrobia</i>		<i>Verrucomicrobia</i> (phyla) <i>Verrucomicrobiaceae</i>