

SUPPLEMENTARY TABLE

Supplementary Table 1. KEGG pathways modified upon LAB and p62-LAB treatment. Only pathways with a p<0.05 are shown.

| KEEG pathways | Groups | P-value |
|--|---------------------|---------|
| catechol degradation to β -keto adipate | Control vs. p62-LAB | 0.0129 |
| 3-phenylpropanoate and 3-(3-hydroxyphenyl)propanoate degradation to 2-oxopent-4-enoate | Control vs. p62-LAB | 0,0295 |
| 3-phenylpropanoate and 3-(3-hydroxyphenyl)propanoate degradation to 2-oxopent-4-enoate | LAB vs. p62-LAB | 0.0097 |
| 3-phenylpropanoate degradation | Control vs. p62-LAB | 0.0332 |
| 3-phenylpropanoate degradation | LAB vs. p62-LAB | 0.0097 |
| toluene degradation III (aerobic) (via p-cresol) | Control vs. p62-LAB | 0.0078 |
| catechol degradation III (ortho-cleavage pathway) | Control vs. p62-LAB | 0.0129 |
| aromatic compounds degradation via β -keto adipate | Control vs. p62-LAB | 0.0129 |
| superpathway of salicylate degradation | Control vs. p62-LAB | 0.0129 |
| 4-methylcatechol degradation (ortho cleavage) | Control vs. p62-LAB | 0.0129 |
| cinnamate and 3-hydroxycinnamate degradation to 2-oxopent-4-enoate | Control vs. p62-LAB | 0.0218 |
| cinnamate and 3-hydroxycinnamate degradation to 2-oxopent-4-enoate | LAB vs. p62-LAB | 0.0295 |
| 3-phenylpropanoate and 3-(3-hydroxyphenyl)propanoate degradation | Control vs. p62-LAB | 0.0218 |
| 3-phenylpropanoate and 3-(3-hydroxyphenyl)propanoate degradation | LAB vs. p62-LAB | 0.0295 |