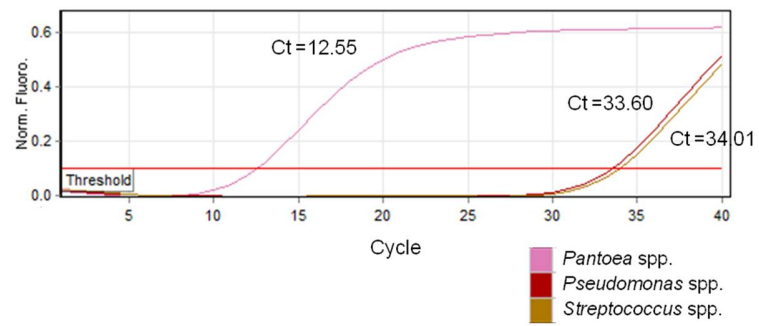
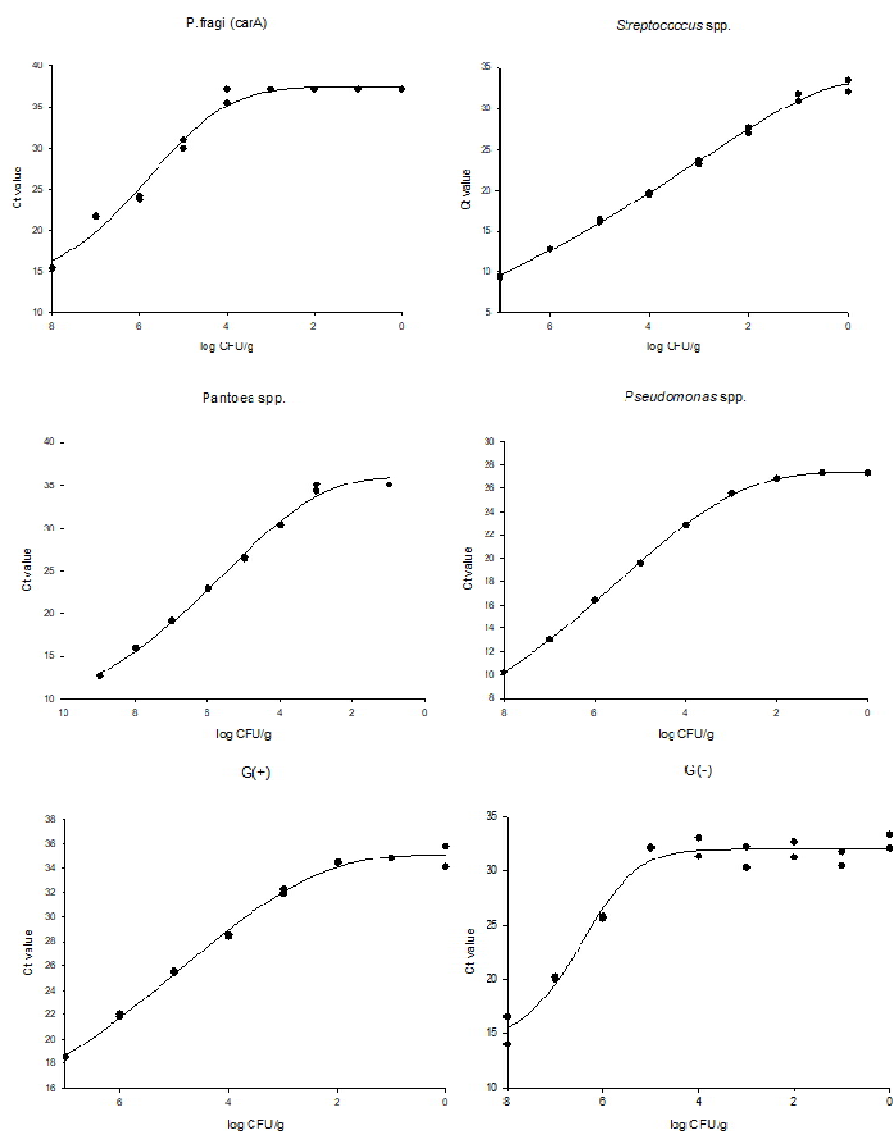


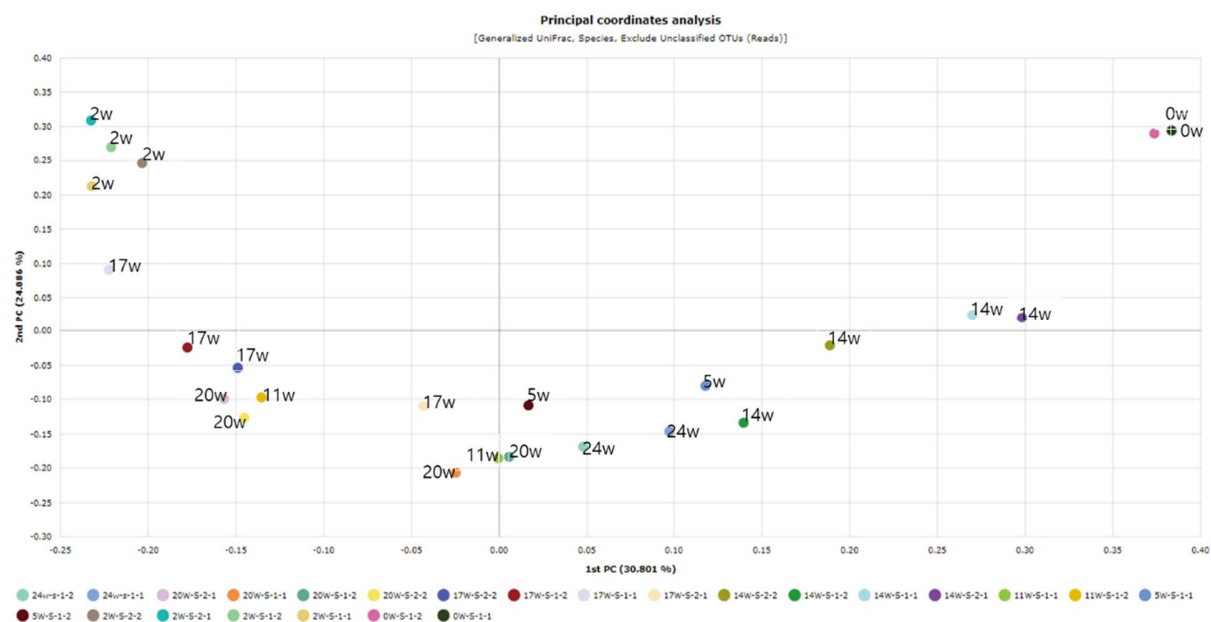
## Supplementary Files



**Figure S1.** Amplification curve using primers detecting *Pantoea* spp..  
\*Ct = Cycle threshold



**Figure S2.** Standard curve for each primer used to detect bacteria in the study.



**Figure S3.** Metagenomics analysis (Principal coordinates analysis (PCoA)) graph on the microflora in beef at 0–20 weeks of dry-aging.

**Table S1.** Bacterial strains used in this study.

| Strains                            | Number                    | Source        |
|------------------------------------|---------------------------|---------------|
| <i>Pantoea agglomerans</i> entry 1 | <sup>1</sup> KCTC62152    | Sweet potato  |
| <i>Pantoea allii</i> entry 3       | KCTC62147                 | Sweet potato  |
| <i>Pantoea ananatis</i> entry 4    | KCTC62150                 | Sweet potato  |
| <i>Pantoea dispersa</i>            | KCTC62144                 | Sweet potato  |
| <i>Pseudomonas veronii</i>         | <sup>2</sup> KEMB1602-355 | Freshwater    |
|                                    | KEMB1602-181              | Freshwater    |
| <i>Pseudomonas fragi</i>           | KEMB1602-162              | Soil          |
|                                    | KEMB3-342                 | Seawater      |
|                                    | 3B-104 (This study)       | Dry-aged beef |
| <i>Pseudomonas fluorescens</i>     | KACC10323                 | Soil          |
| <i>Pseudomonas aeruginosa</i>      | <sup>3</sup> NCCP10338    | –             |
| <i>Streptococcus salivarius</i>    | KCTC5091                  | Dairy product |
| <i>Listeria monocytogenes</i>      | SI-7 [25]                 | Beef          |
|                                    | SI-10 [25]                | Beef          |
| <i>Escherichia coli</i>            | 11-1 [25]                 | Smoked duck   |
|                                    | 11-2 [25]                 | Smoked duck   |
| <i>Carnobacterium divergens</i>    | 3R-28 (This study)        | Dry-aged beef |

<sup>1</sup> KCTC, Korean collection for type cultures(Jeongup, South Korea) Tables may have a footer.

<sup>2</sup> KEMB, Korea environmental microorganisms bank(Kyonggi, South Korea) Tables may have a footer.

<sup>3</sup> NCCP, National culture collection for pathogens(Cheongju, South Korea) Tables may have a footer.