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| --- | --- |
|  **Indicator** **strains****CFS from *Enterococcu*** **isolates** | **Inhibition zone diameters (mm) formed against indicator strains after treatment of CFS from enterococcal isolates with** |
| 1N NaOH (Neutralization)  | Catalase | Proteinase K |
| ***S. aureus*** | ***St. thermophilus*** | ***E. coli*** | ***Ps. aeruginosa*** | ***S. aureus*** | ***St. thermophilus*** | ***E. coli*** | ***Ps. aeruginosa*** | ***S. aureus*** | ***St. thermophilus*** | ***E. coli*** | ***Ps. aeruginosa*** |
| **E5 -CFS**  | 26±0.17 | 25±0.23 | 14±0.04 | 15±0.35 | 26±0.14 | 25±0.02 | 14±0.01 | 15±0.25 | 20±0.07 | 21±0.13 | 10±0.32 | 8±0.15 |
| **E9-CFS**  | 25±0.44 | 27±0.31 | 10±0.25 | 10±0.24 | 0 | 0 | 0 | 0 | 29±0.14 | 27±0.11 | 12±0.20 | 11±0.17 |
| **E12-CFS**  | 19±0.45 | 23±0.06 | 12±0.05 | 11±0.01 | 0 | 0 | 0 | 0 | 23±0.05 | 25±0.07 | 14±0.15 | 13±0.11 |

**Supplementary data 1:** Testing for the potentiality of bacteriocin-producing *Enterococcus* isolates

(a)

(b)

**Supplementary data 2:** Identification of the most promising isolate as well as its bacteriocin kinetics. (a) Phylogenetic tree of *Enterococcus thailandicus* (E5) isolate showing the position of the target isolate (as pointed by the arrow) among the selected *Enterococci* based on 16Sr RNA sequences from NCBI, (b) Growth curve of *Enterococcus* E5 along with the bacteriocin activity over 72 hours.

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| **Treatment** | **Bacteriocin residual activity (%±SD)** | ***P*-value** |
| **Temperature**:4 oC, 30 min25 oC, 30 min40 oC, 30 min60 oC, 30 min70 oC, 30 min100 oC, 30 min121 oC, 30 min | 100±0.296.5±0.5180.8±0.3378.1±0.0275±0.866.5±0.3151.01±0.2 | 0.040.40.080.080.070.050.03 |
| **pH value:**2345678910 | 72.3±0.1577.6±0.3383±0.1898.1±0.5100.3±0.74100±0.0870.6±0.3439.22±0.20±0 | 0.080.080.070.110.210.130.090.0040.000 |
| **Enzymes:**Proteinase-Kα-amylaseα-chymotrypsintrypsinlysozymecatalaselipase |  82±0.02100.4±0.1232.2±0.0641.7±0.4492±0.03100.1±0.6100±0.17 | 0.070.080.020.0010.070.060.23 |
| **Detergents and others:**SDSUreaTriton X-100Tween 80EDTAChloroform | 93.3±0.2295.2±0.0596±0.4597.6±0.0496.4±0.3391.1±0.08 | 0. 10. 430.090.540.070.08 |

**Supplementary data 3:** Effects of different treatments on the antibacterial activity of the purified bacteriocin