**Supplementary Table S1: Morphological, biochemical and physiological characteristics of *Isoptericola variabilis* UD-6 strain**

|  |  |
| --- | --- |
| **Characteristic** | **Result** |
| Sampling source | hot spring water |
| **Morphological characterization** |  |
| Gram reaction | + |
| Cell shape | short rod |
| Colony shape | irregular |
| Colony size | medium |
| Surface | corrugated |
| Opacity | opaque |
| Motility | - |
| Pigmentation | white |
| **Sugar fermentation** |  |
| D-glucose | + |
| D-mannitol | + |
| D-xylose | + |
| Maltose | + |
| Sucrose | + |
| **Physiological characterization** |  |
| Optimum temperature | 50 °C |
| Optimum pH | 8.0 |
| NaCl tolerance | Up to 8% |

**Note:** + = positive, - = negative