Claims

1. A bacterium when used in degrading sludge, the bacterium having a 16S rRNA gene comprising a nucleotide sequence having 97% or more identity to the nucleotide sequence represented by SEQ ID NO: 1.

2. The bacterium according to claim 1, having a 16S rRNA gene comprising the nucleotide sequence represented by SEQ ID NO: 1.

3. The bacterium according to claim 2, wherein the bacterium satisfies at least one of

the 423rd base in SEQ ID NO: 1 being adenine,
the 441st base in SEQ ID NO: 1 being cytosine, and
the 1236th base in SEQ ID NO: 1 being guanine.

4. The bacterium according to any one of claims 1 to 3, wherein the bacterium has an ability to degrade a target microorganism and the target microorganism is at least a killed bacterium of the genus *Micrococcus*.

5. A bacterium when used in degrading sludge, wherein the bacterium is deposited under Accession number NITE BP-03020.

6. A microbial preparation for degrading sludge, comprising a bacterium (a1) or a culture thereof:

bacterium (a1): *Brevibacillus parabrevis* having a 16S rRNA gene comprising a nucleotide sequence having 97% or more identity to the nucleotide sequence represented by SEQ ID NO: 1.

7. The microbial preparation for degrading sludge according to claim 6, further comprising a microorganism (a2):

microorganism (a2): a microorganism different from bacterium (a1), wherein the percentage of the bacteria (a1) based on the total number of the bacteria (a1) and the microorganism (a2) is 0.1% or more and less than 100%.

8. The microbial preparation for degrading sludge according to claim 7, wherein the microorganism (a2) has a 16S rRNA gene comprising a nucleotide sequence having 90% or more identity to the nucleotide sequence represented by SEQ ID NO: 7, and comprises at least one species selected from the group consisting of bacteria having an ability to degrade a target microorganism, bacteria of the genus *Bacillus* having an ability to degrade a target microorganism, and bacteria of the genus *Paenibacillus* having an ability to degrade a target microorganism.

9. A method for degrading sludge, comprising allowing a bacterium having a 16S rRNA gene comprising a nucleotide sequence having 97% or more identity to the nucleotide sequence represented by SEQ ID NO: 1, or the microbial preparation for degrading sludge according to any one of claims 6 to 8 to act on sludge.

10. A device for degrading sludge, wherein the device comprises a bacterium having a 16S rRNA gene comprising a nucleotide sequence having 97% or more identity to the nucleotide sequence represented by SEQ ID NO: 1, or the microbial preparation for degrading sludge according to any one of claims 6 to 8.