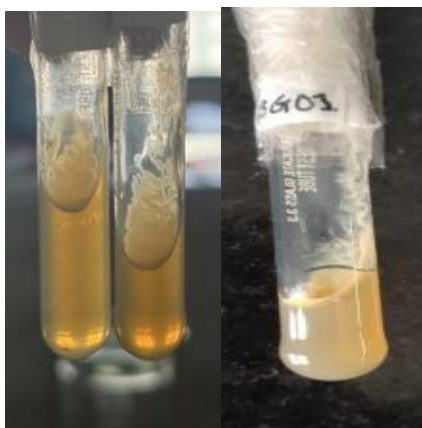




Figure 1: Isolation of microbes on solidified nutrient agar.



(a)

(b)

Figure 2: Obtained pure culture of bacteria.

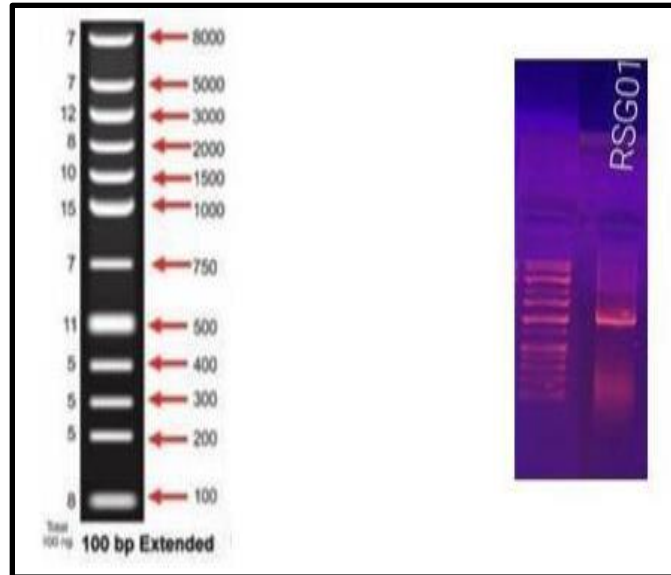


Figure 3: PCR product was obtained on 1.2% agarose gel by gel electrophoresis. The PCR products shows a single band confirming successful amplification at targeted region of 16S rRNA gene at 1500bp using 27 forward, 1492 reverse primer.

Lane 1: DNA Ladder at 100bp extended

Lane 2: PCR product of uncultured bacterium species (RSG01 sample)

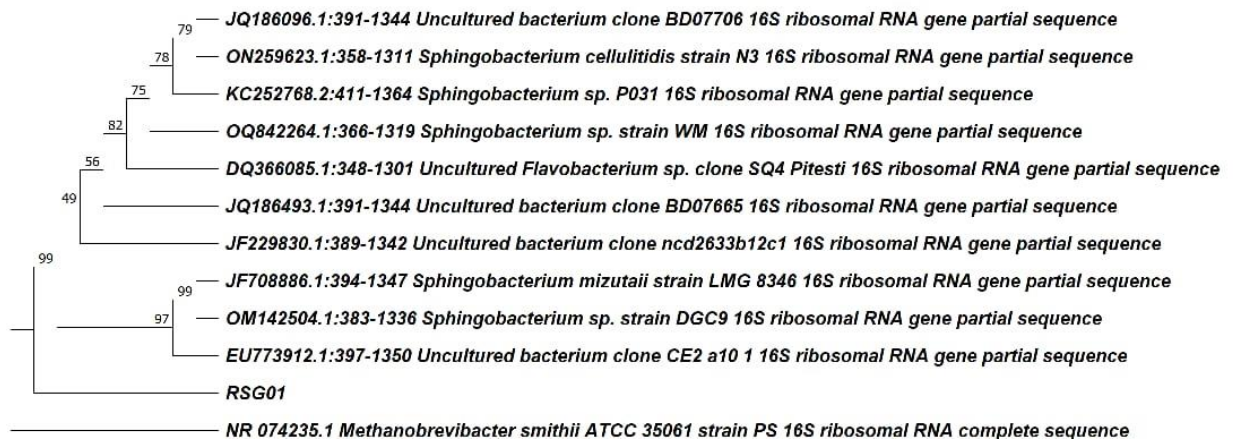


Figure 4: Phylogenetic analysis of the bacterial culture with sample RSG01 ID under study.

Table 1: Preparation of polymerase chain reaction composition.

Component	Component Volume
HI-PCR® REDy Master Mix	12.5 µl
Forward primer	1.5 µl
Reverse primer	1.5 µl
+	3.0 µl
Nuclease free water	6.5 µl
Total reaction volume	22 µl

Table 2: RSGO1 sample showing similarity searches in sequence alignment

Sr. no	Sample ID	Description	Max. Score	Total Score	Query coverage	E-value	Percent Similarity
1	RSGO1	<i>Uncultured bacterium</i>	1096	1096	100%	0.0	87.07%