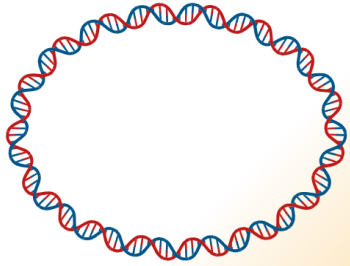


Genome Announcement: *Alcaligenes sp.*

Accession#SAMEA116290119 (NCBI)

#INS0005067 (IBDC)

1. Genome Sequencing



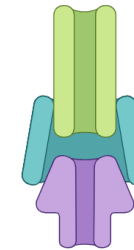
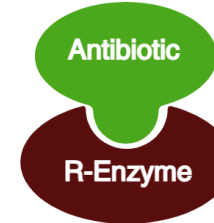
BRIC-THSTI
presenting the whole
genome sequence
of *Alcaligenes sp.*
isolated from the
Indian wastewater
source.

2. Analysis



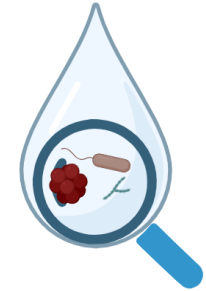
Genomic analysis
uncovers a synergistic
resistance
mechanism: the
AdeABC efflux system
and SMR transporter
work together,
conferring resistance
to industrial
disinfectants.

3. Insights



It carries co-
occurrence of *adeF*
and *qacG* indicates
adaptation to both
clinical (antibiotics)
and industrial
(disinfectants)
pressures suggesting
a potential horizontal
gene transfer

4. Translation



Translational
insights propose a
new therapeutic
strategy involving
disinfectant rotation
and cross-sector
alignment to break
resistance
transmission cycles.

***Alcaligenes sp.*: Packs a double punch—*adeF* and *qacG* fuel resistance, turning it into a stealthy MDR threat!**



जैवप्रौद्योगिकी विभाग
DEPARTMENT OF
BIOTECHNOLOGY

