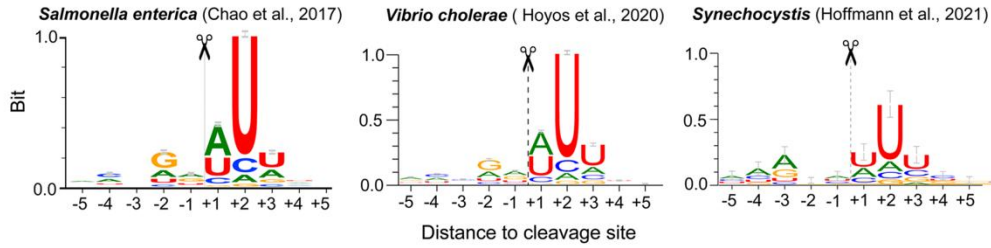


Sequence logos of the nearby 10-nt sequences of RNase E cleavage sites in previous studies



Crutial residues for RNase E-specific cleavage are highly conserved in *A. dieselolei* and other bacteria

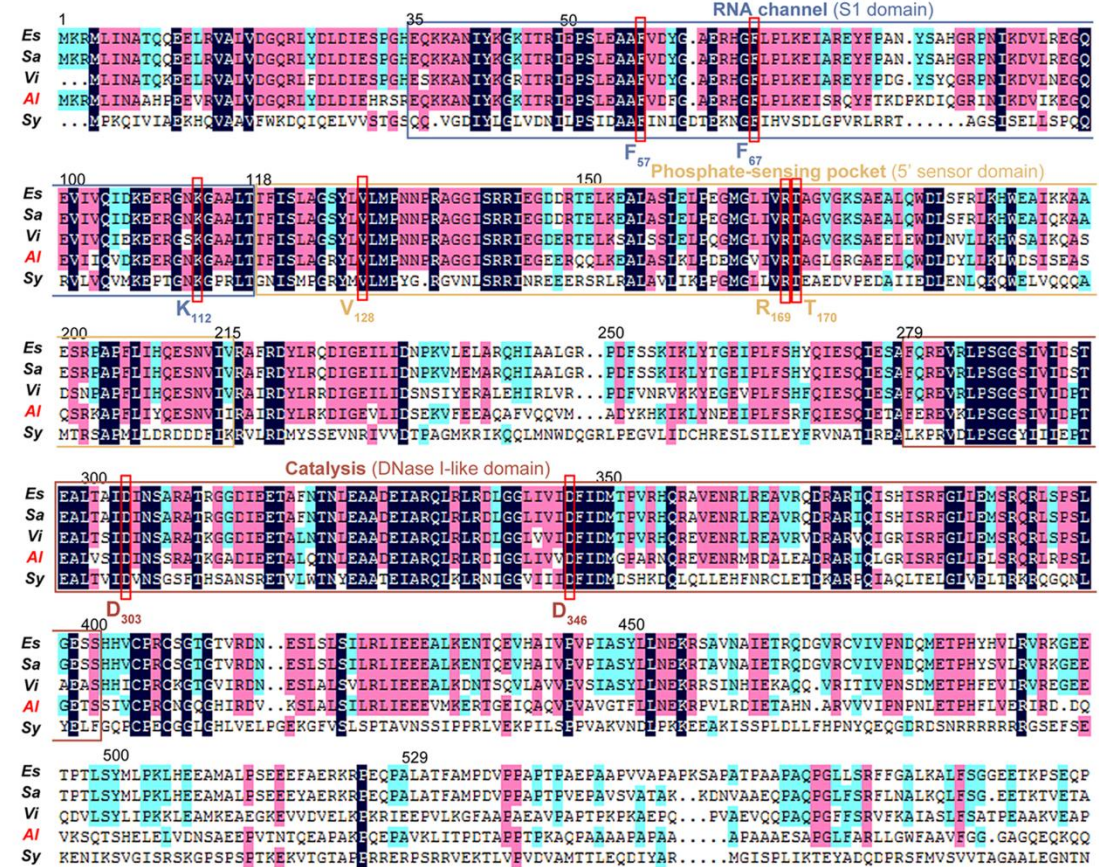


Figure S1 Sequence logos of the TSSs and PSSs, and key residues in RNase E of different species

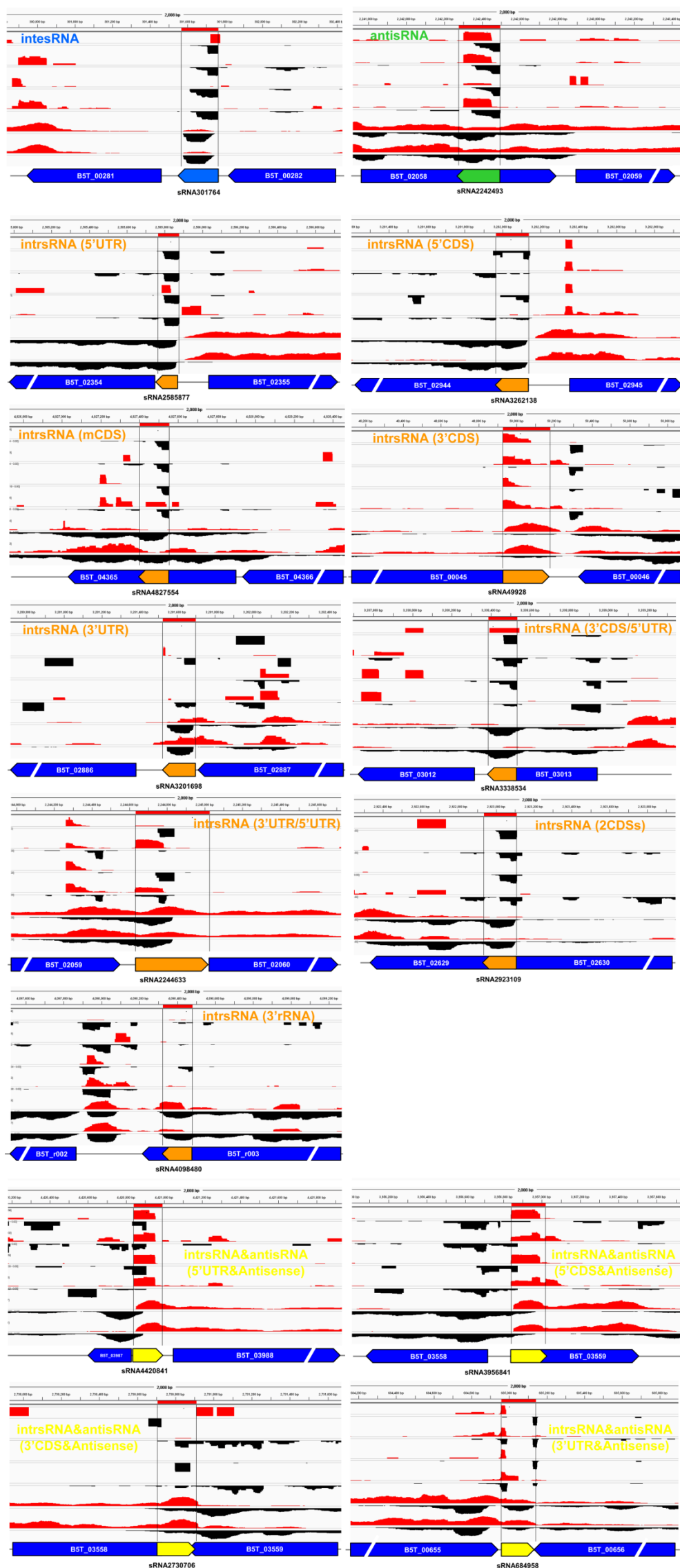


Figure S2 Examples of peak plots of different sRNA classifications based on the genomic locations

The detected read peaks and TSSs of pRNA and 6S RNA in dRNA-seq and ssRNA-seq



The related TSSs in the predicted secondary structure of 6S RNA

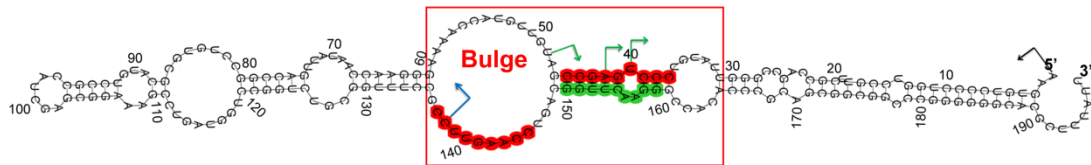


Figure S3 Putative pRNAs of 6S RNA in *A. dieselolei*

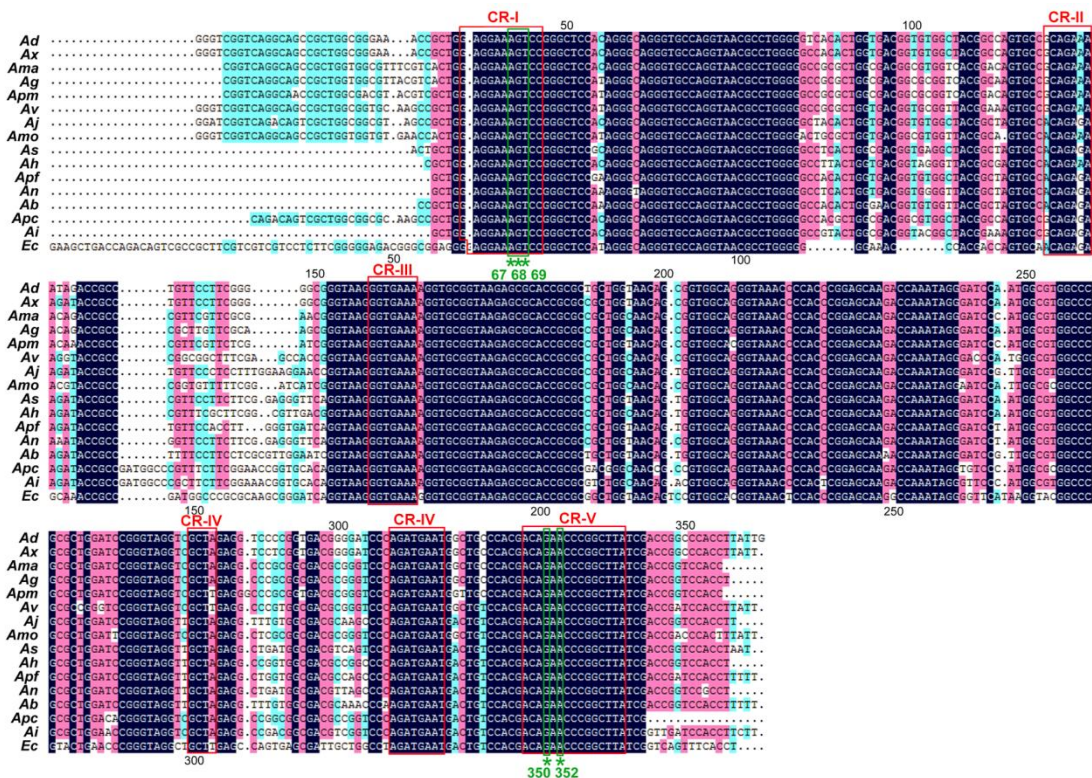
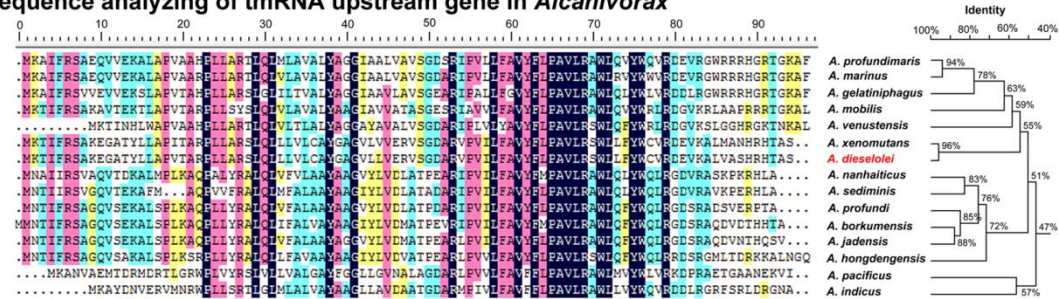
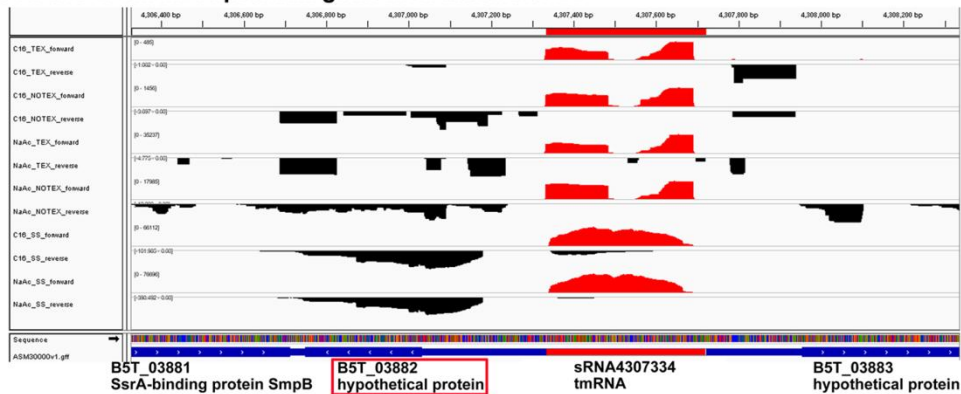


Figure S4 Conserved regions (CR-I to CR-V) and active sites (*) of M1 RNAs in different *Alcanivorax* species

Sequence analyzing of tmRNA upstream gene in *Alcanivorax*



Expressions of tmRNA upstream gene in *A. dieselolei* B5



Comparison of tmRNA MLD in *Alcanivorax* and *E. coli*

<i>E. coli</i>	<i>Alcanivorax</i>
Nts: GCA AAC GAC GAA AAC TAC GCT TTA GCA GCT TAA	Nts: GCA/T AAC GAC GAT A/TCT TAC GCA CTG/A GCG/A GCC/T TAA
AAs: Ala Asn Asp Glu Asn Tyr Ala Leu Ala Ala ***	AAs: Ala Asn Asp Asp Thr/Ser Tyr Ala Leu Ala Ala ***

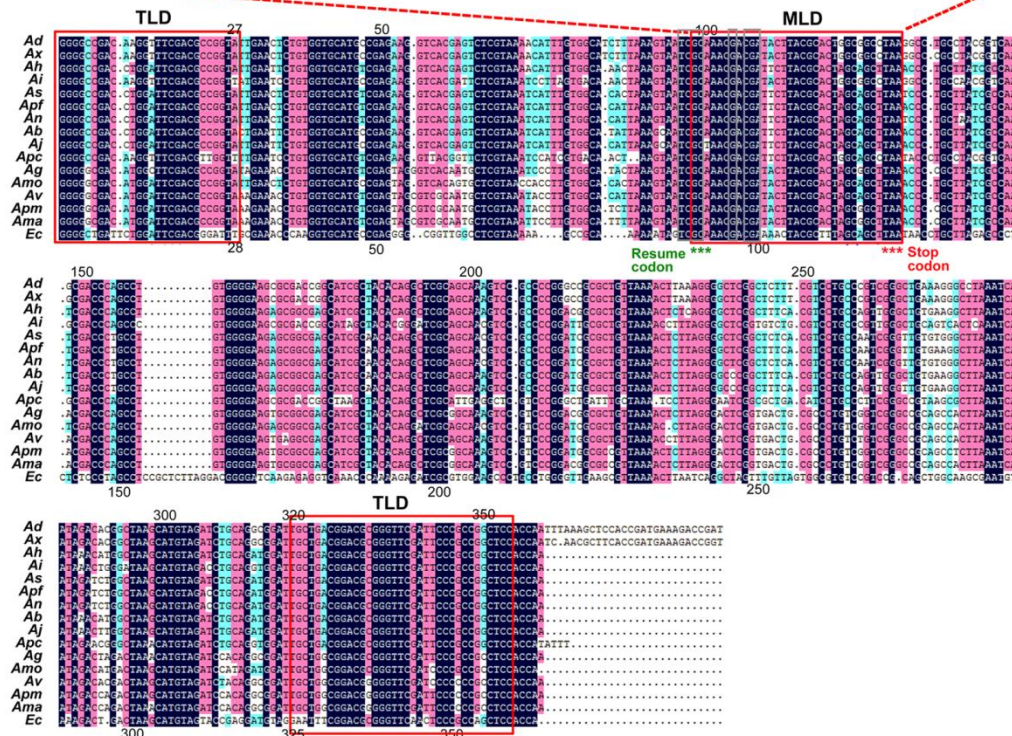


Figure S5 tmRNA upstream gene and MLD features in different *Alcanivorax* species

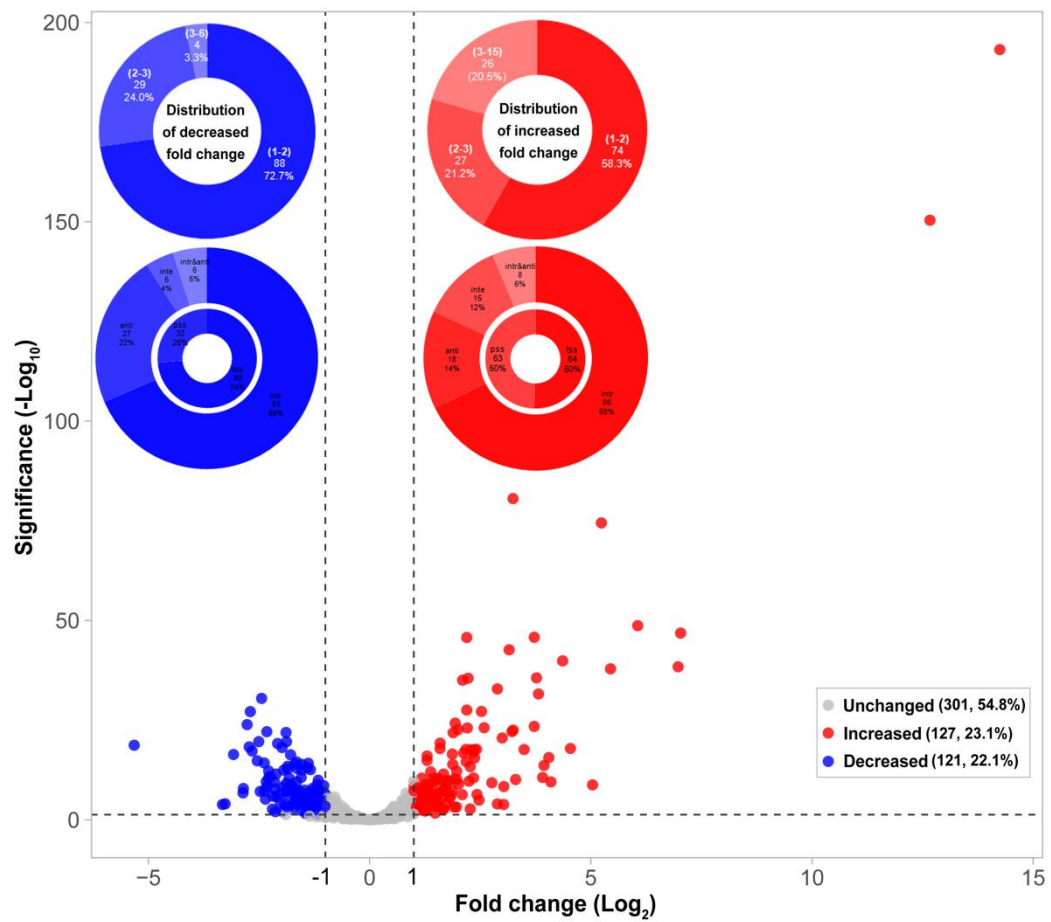


Figure S8 Volcano plots showing the differential expression in alkane versus acetate conditions