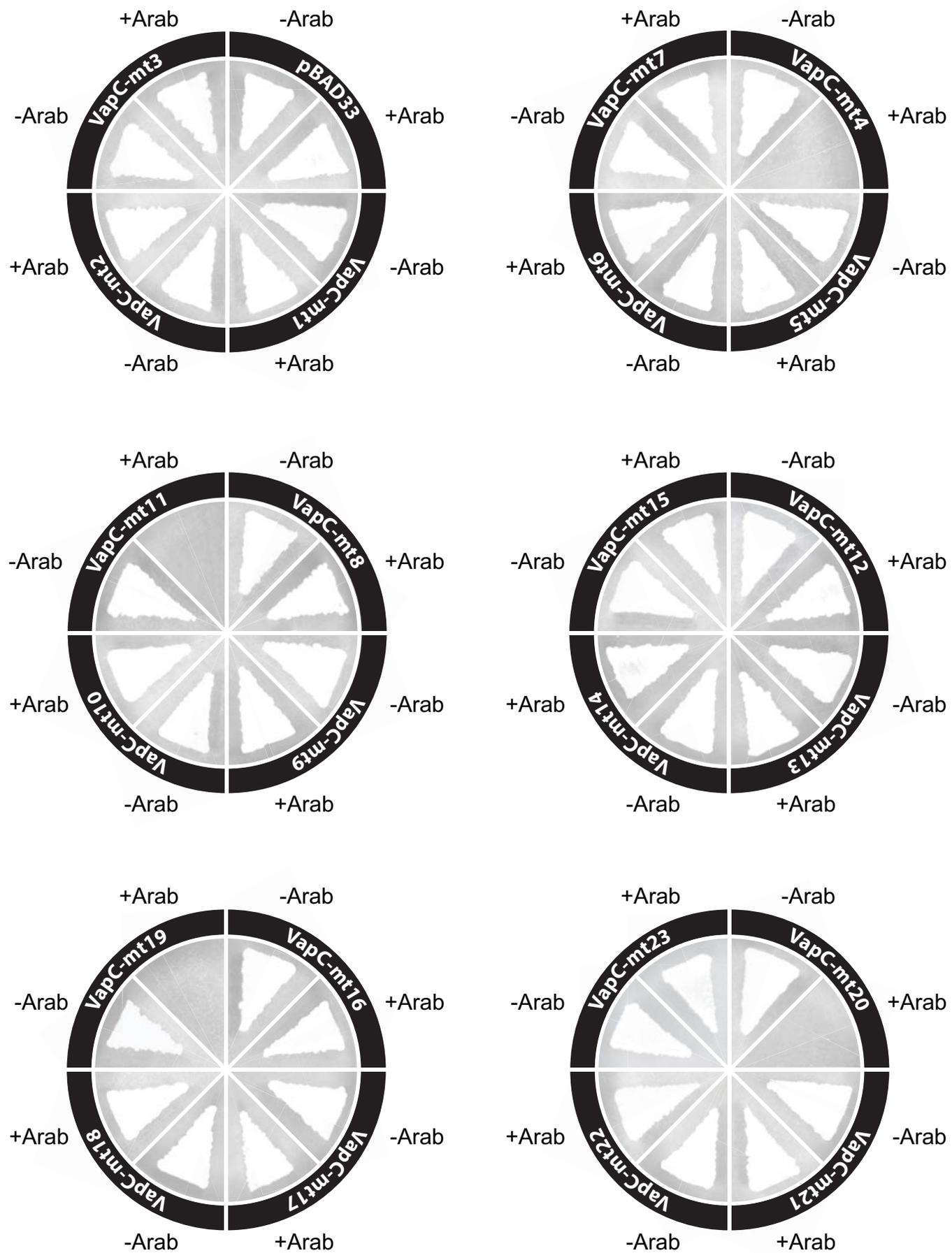
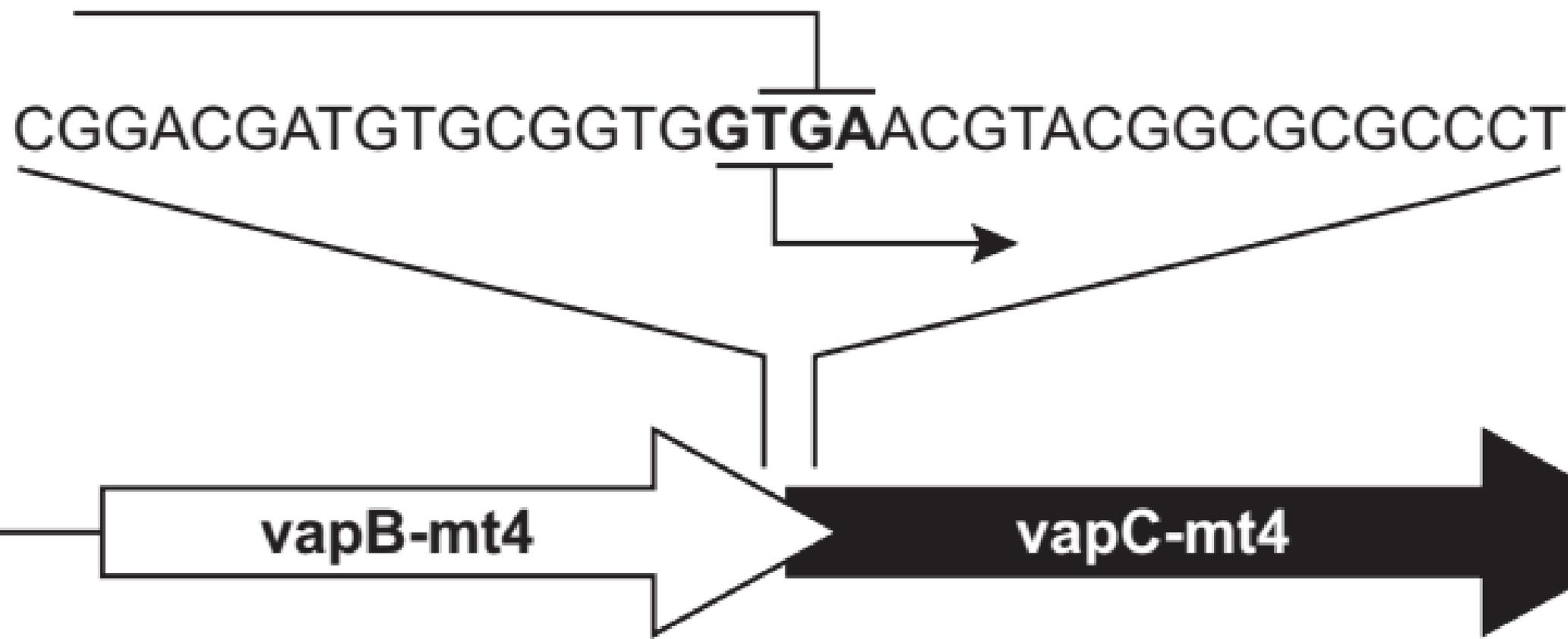


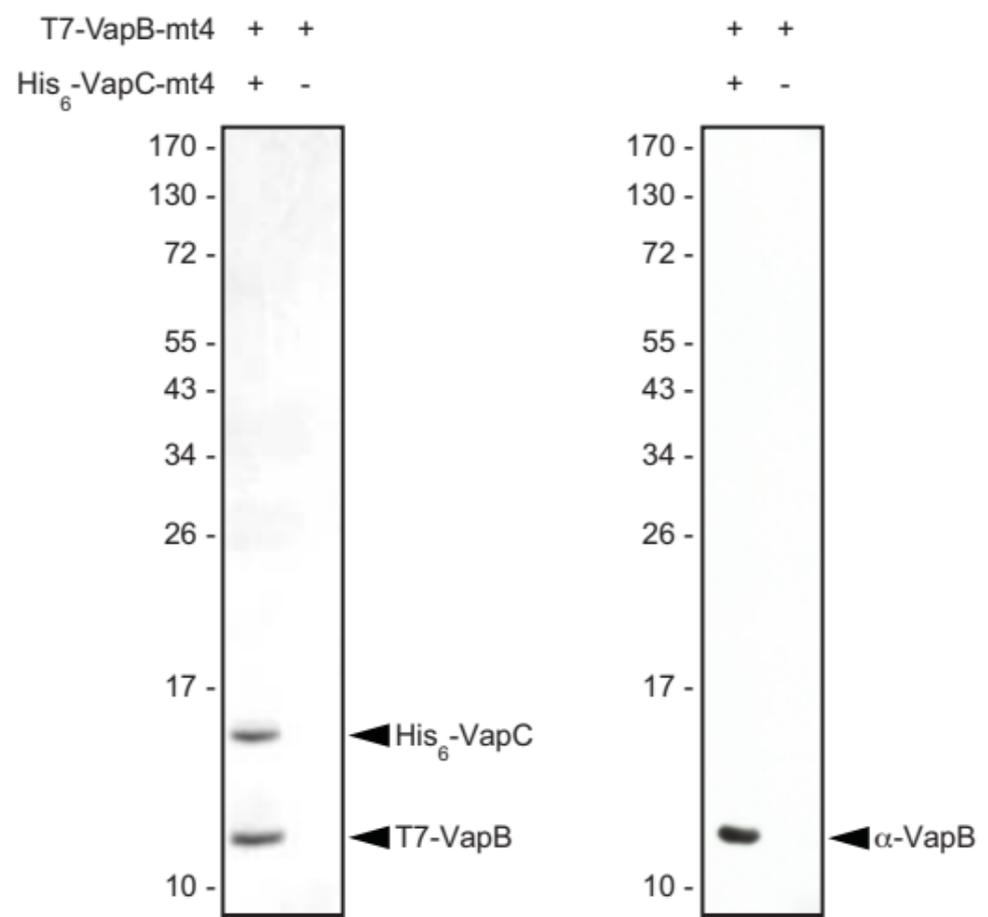
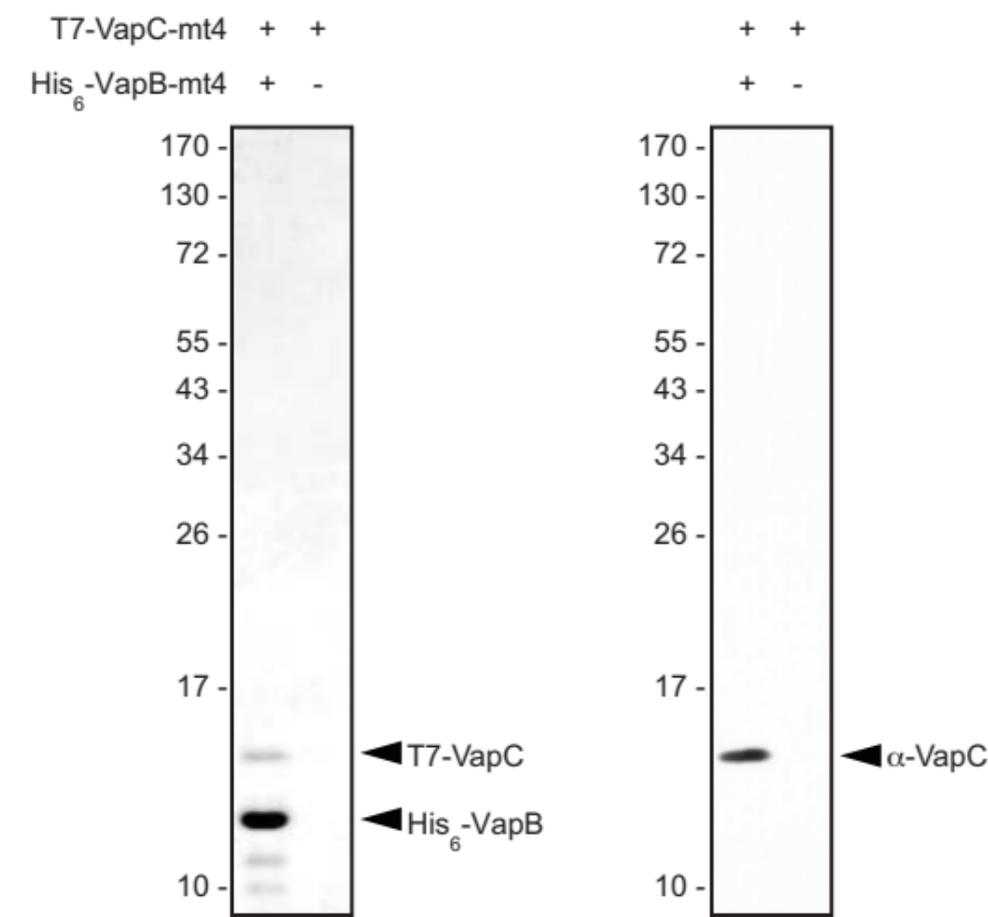
Supplemental Figure 1



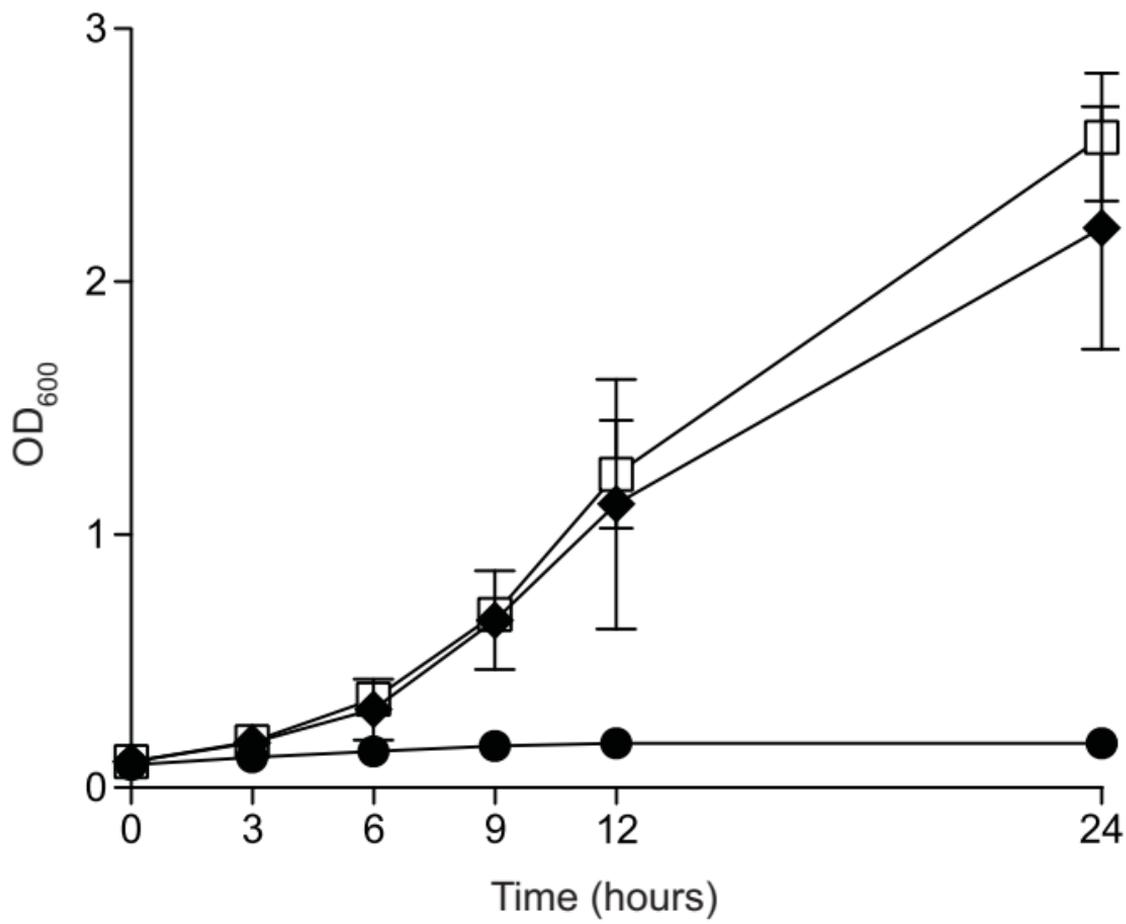
# Supplemental Figure 2



# Supplemental Figure 3

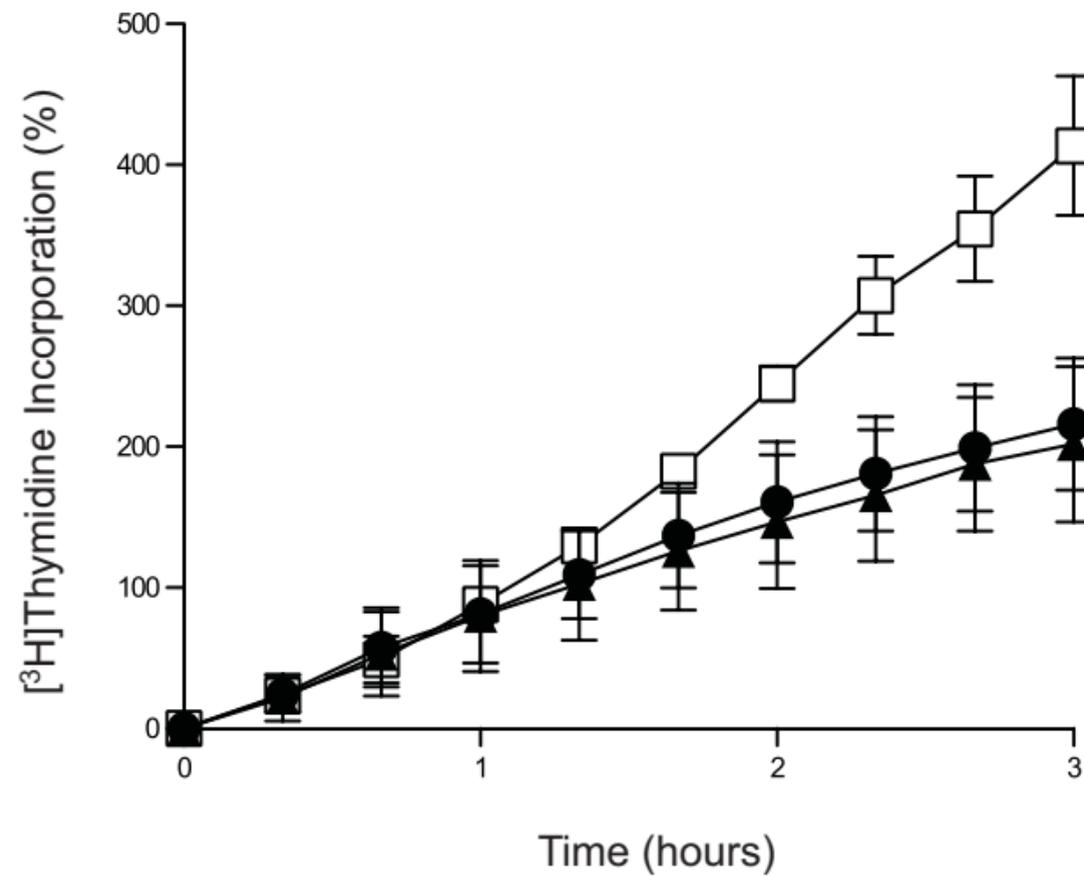
**A****B**

Supplemental Figure 4

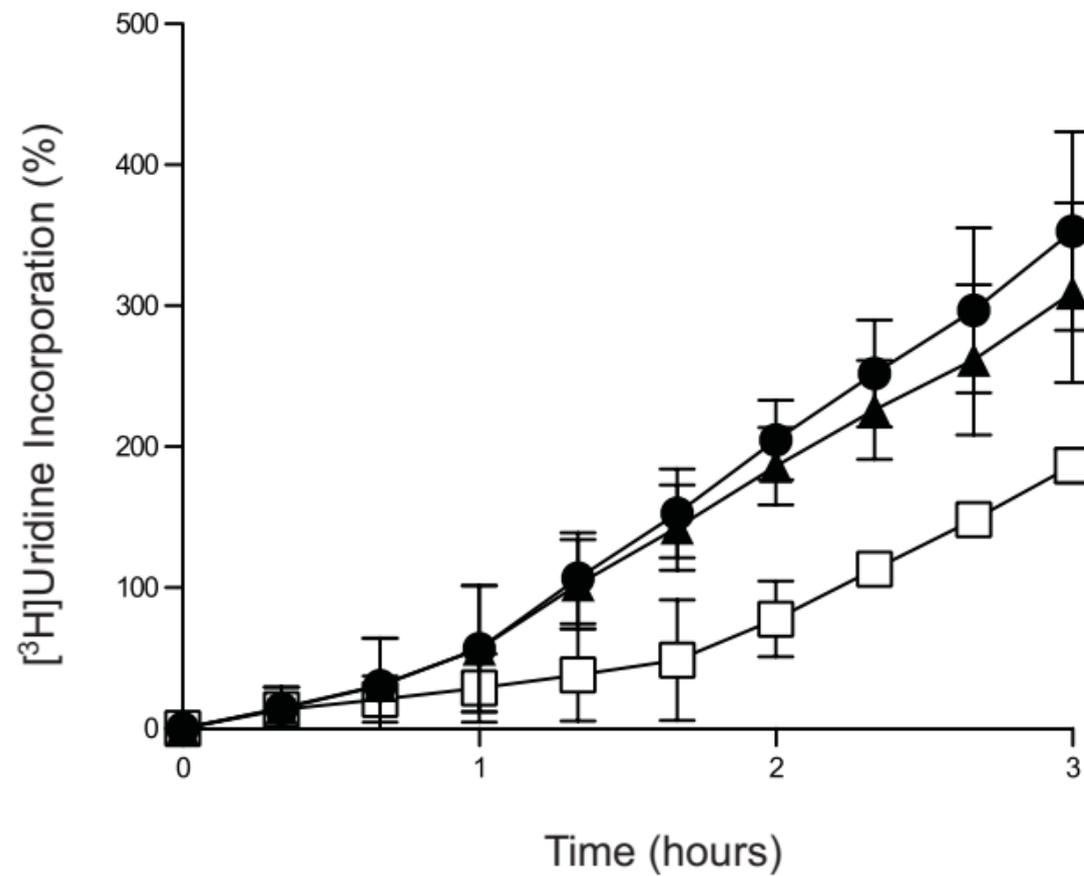


Supplemental Figure 5

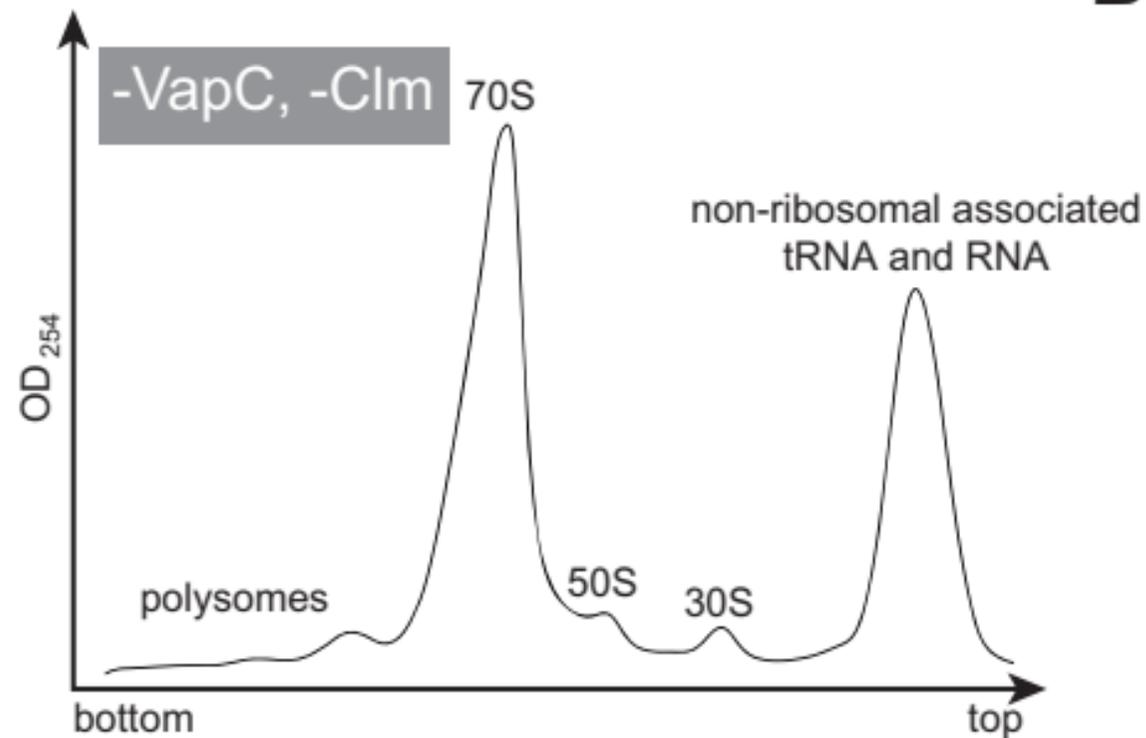
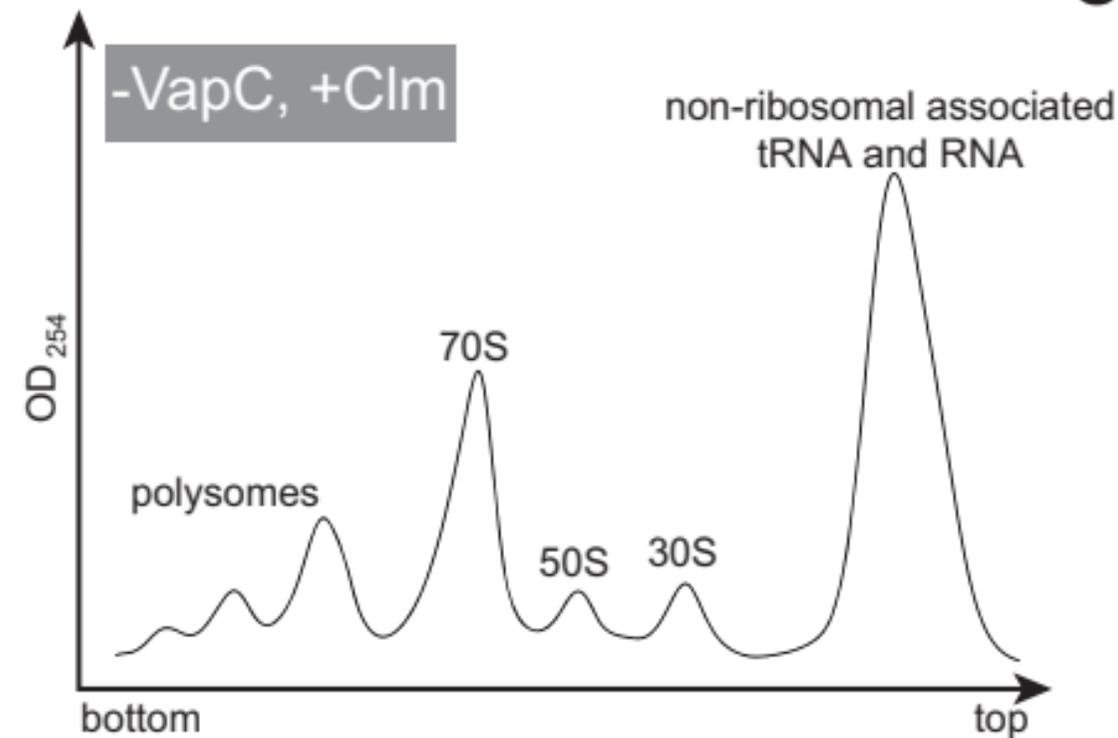
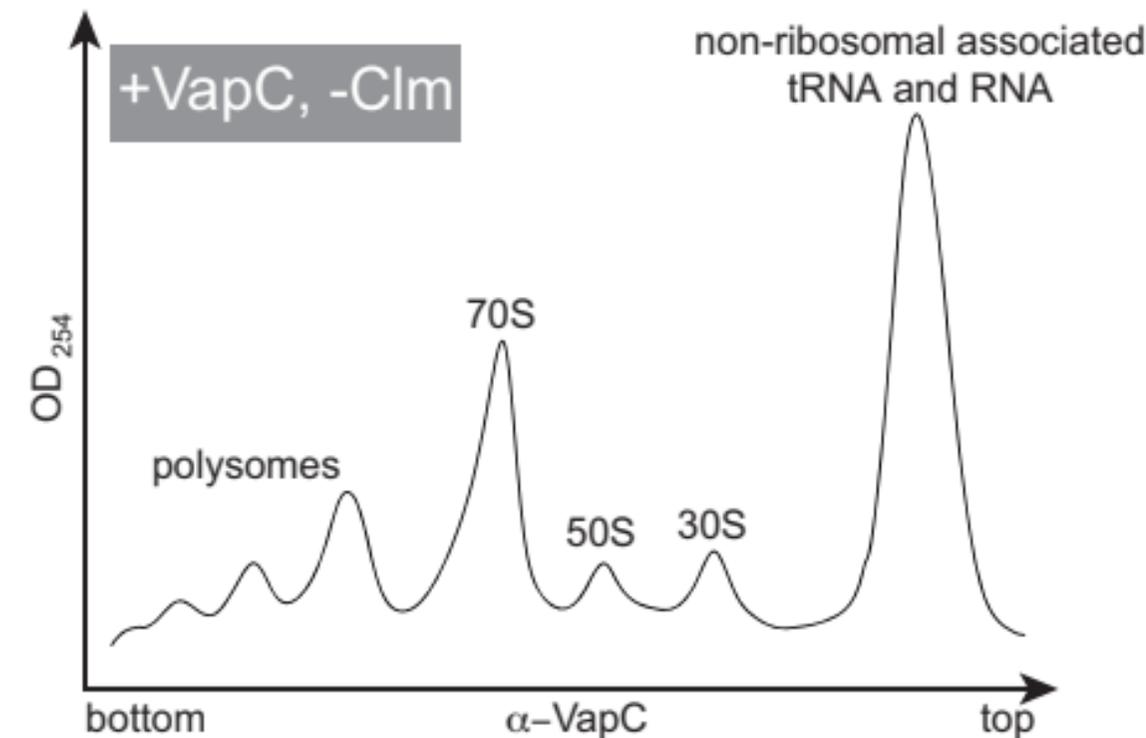
**A**



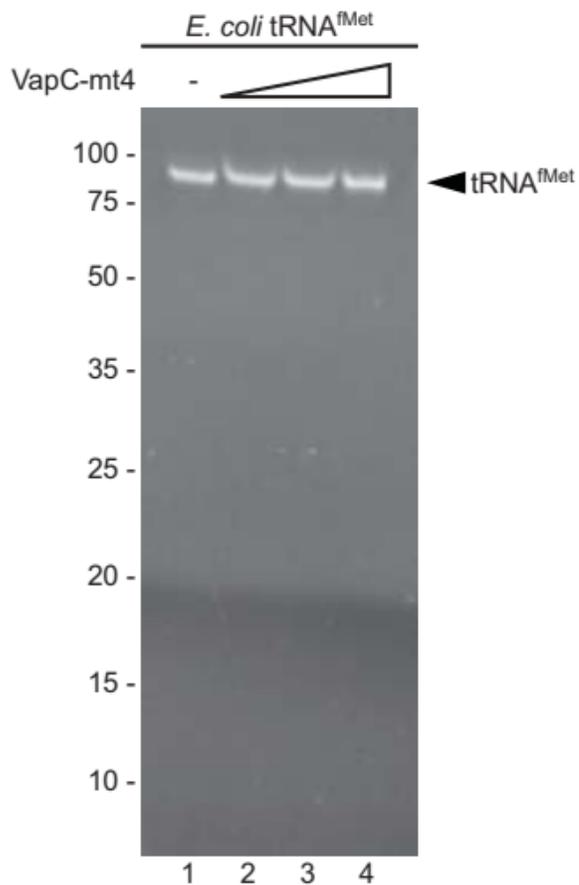
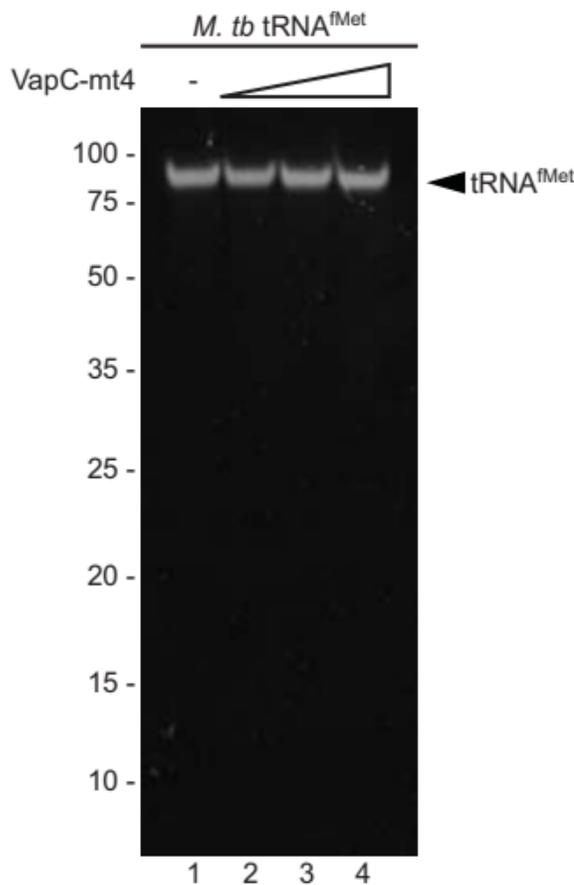
**B**



# Supplemental Figure 6

**A****B****C**

# Supplemental Figure 7

**A****B**

# Supplemental Figure 8

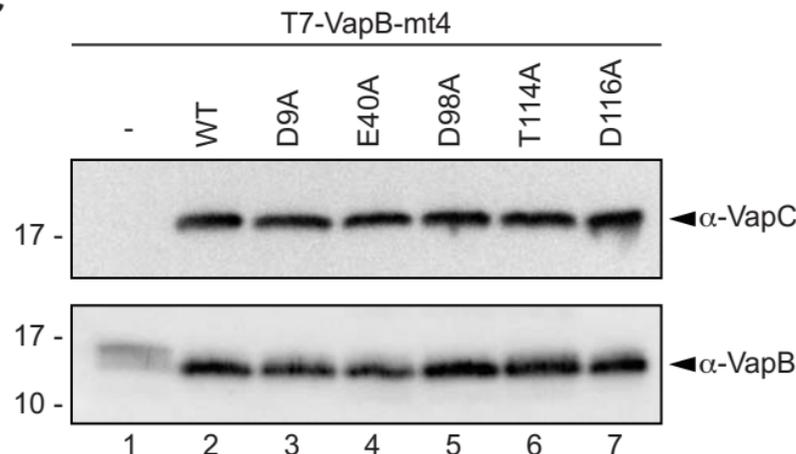
## A

VapC-mt4	RALADTSVFIGIEATRFDP-----DRFAGYEWGVSVVTLGELRLGVL (49) INDSWIAATAVAH-GIAILFIQNDYA 5-116
PAE2754	EYLVDASALYAL-AAHYDK-WIKH-----REKLAILHLTIYEAGNALW (45) FYDASYAYVAES-SGLVLVFIQDRELL 4-114
AF0591	CAVVDTNVLMYVYLNKAD--VVGQLREFGFSRFLITASVKRELEKLEM (27) EGDPSLIEAAEK-YGCILIFMDKELK 13-110
FitB	MILLDTNVISEPLRPQPNERVVAWLDSLILEDEVYLSAITVAELRLGVA (53) AADGYIAATAKQH-SLTVAFRDTGSF 1-122
SMG-5	YVLMQYDVIDDKIRIALKIWDI----DDFICILPSTVLDELQYQKTKN (41) AEDHKHIVAF (8) KEMEGVTFYDIDQF 427-543
NMD4p	NFIIDASAFEKGLGNIKRWCSDCTEAVTLNFYIPTFTLNELDFLQRR (57) KRLKNLLKSC (13) HWFLIIS-EDPQIR 5-143
anon34Ea	FVVVDSKALTEYNGIVKSLVR----TKKCIVLIPNAVLNELDLKRS (39) KMDRDASVFL (24) VVTYLS-GDNLHE 1013-1141
PolI	LFVIDASGFIFRAYFALPEMK (17) NKLIKEFSPEYMISVFDGPNNKQ (46) EADDVIASIA (9) YKVYVCFADKDLL 4-138
RNase H	ICLIDFSQIALSTALVNFPDK (19) VKKAKTLGYTKIVLCIDNAKSGY (52) EADDHIAVLV (7) HKILIIIS-SDGDFT 15-159
FENI	KVAIDGMNALYQFLTISRRLD (20) KTIHLLENDITPIWVFDGPEPKL (65) EGEAQASYMAKKGDVWAVVSIQDYDAL 23-177

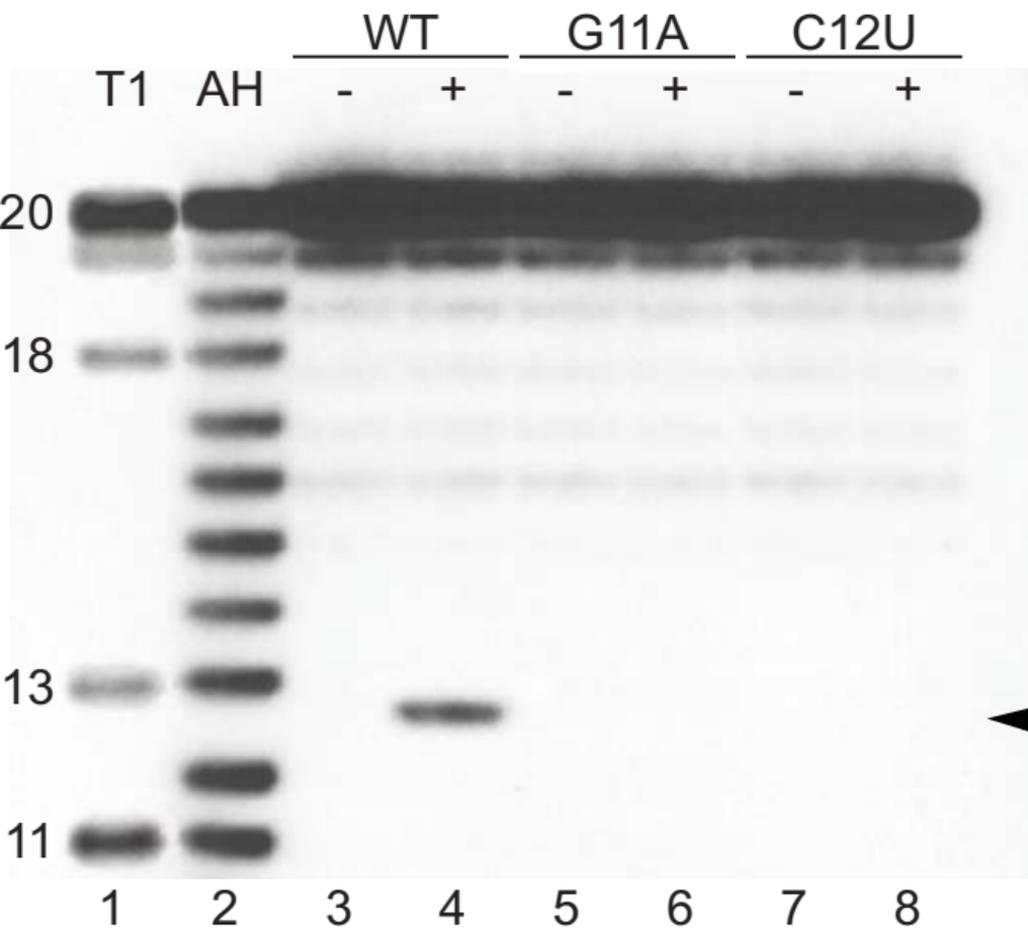
## B



## C



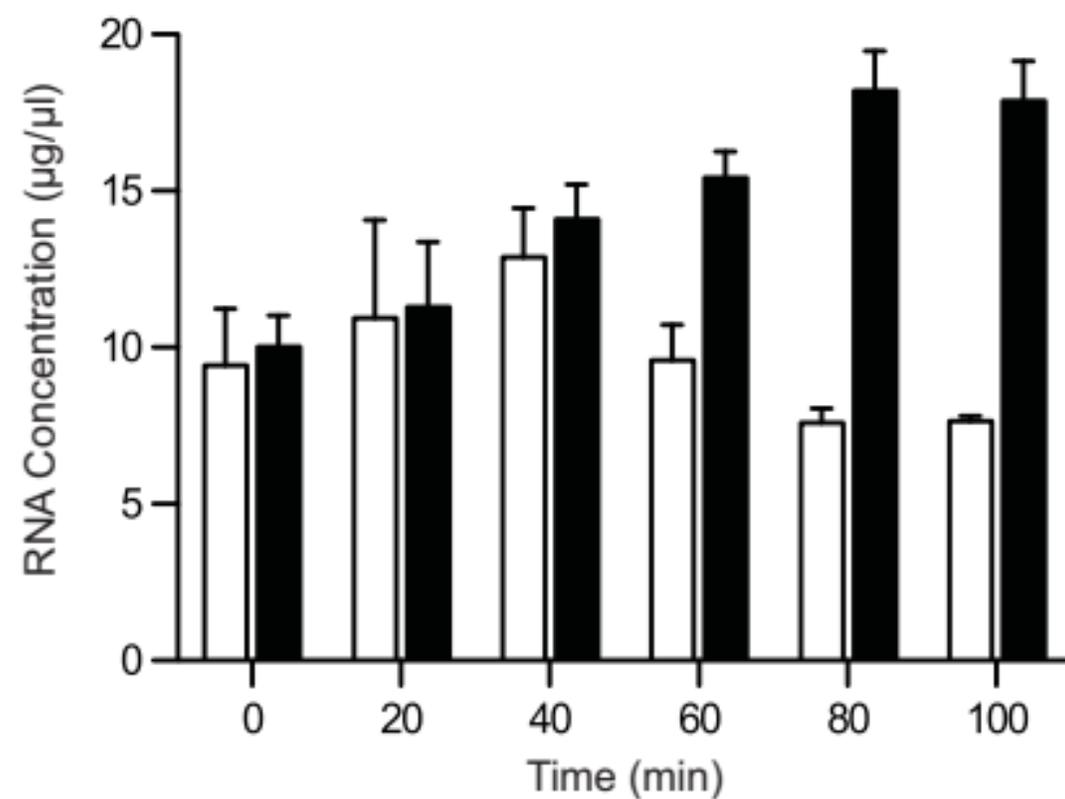
# Supplemental Figure 9



5' AGGAAGAU**ACGCG**GAUAUGAA 3'

2 3          6          11 13          18

# Supplemental Figure 10

**A****B**