

CONCEPT: TRANSCRIPTION TERMINATION IN PROKARYOTES

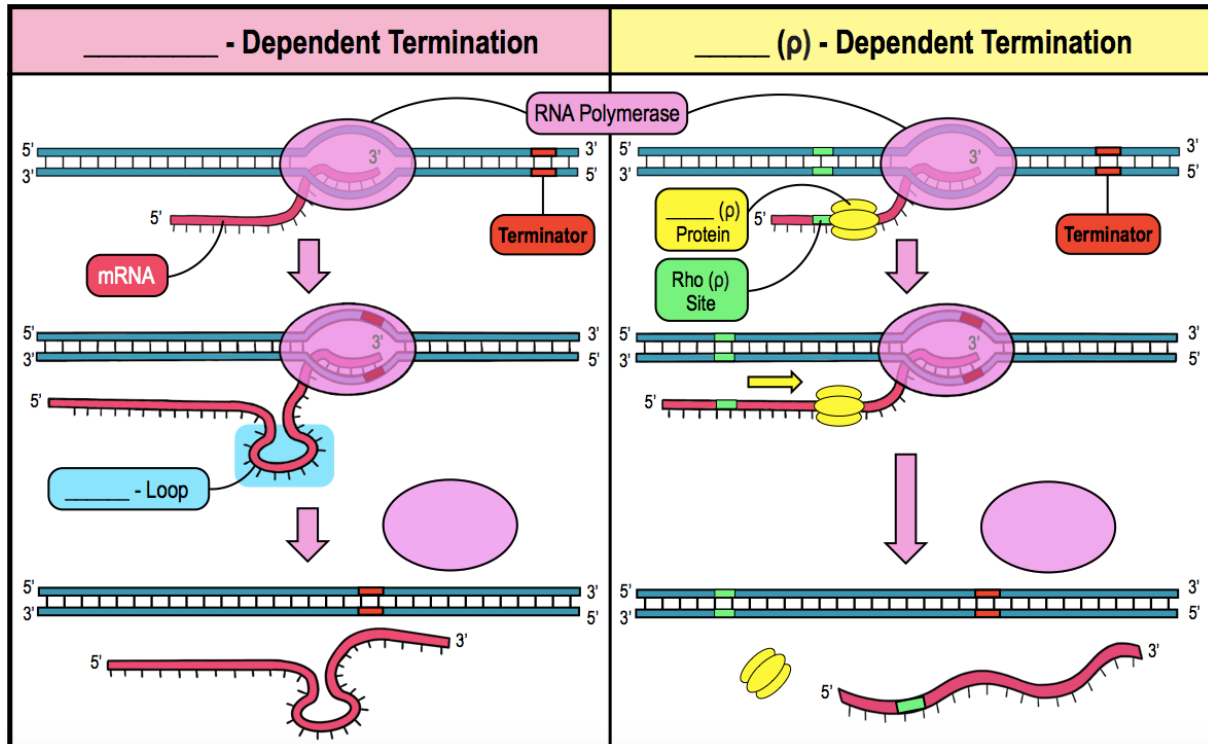
● In prokaryotes, termination can occur in one of ____ ways:

1) **Factor-Dependent Termination:** ____ forms a *stem-loop* structure causing termination.

□ Change in mRNA structure causes polymerase to dissociate from the DNA.

2) **Rho-Dependent Termination:** Terminator protein ____ (ρ) binds to mRNA & causes termination.

□ Rho protein binds to ____ site on mRNA & causes polymerase to dissociate from the DNA.



PRACTICE: The rho protein functions in:

- a) Protein secretion.
- b) Termination of transcription.
- c) Initiation of translation.
- d) Termination of translation.
- e) Release of ribosome from the mRNA.

PRACTICE: Which of the below statements is false?

- a) Factor-dependent and rho-dependent termination are both methods for stopping DNA replication.
- b) Factor-dependent termination involves a hairpin or stem-loop structure.
- c) Rho-dependent termination involves the rho (ρ) protein.
- d) All of the above are true.