## **CONCEPT:** REVIEW OF LAC & TRP OPERONS

•Now let's review the *lac* and *trp* operons:

	lac Operon	<i>trp</i> Operon
Operon type		
# of Genes	<u> </u>	_
Function of operon genes	Lactose	Tryptophan
Repressor gene		
Regulatory molecule	(Inducer)	(Corepressor)
Effect of regulatory molecule	Repressor Protein   Repressor Protein	Repressor Protein Total
Regulatory molecule  Absent ×	Operon turned	Operon turned
Regulatory molecule  Present	Operon turned	Operon turned

## PRACTICE: Which of the following statements is FALSE?

- a) The *lac* operon is an inducible operon that is normally turned off.
- b) The *trp* operon is a repressible operon that is normally turned on.
- c) Lactose is the inducer molecule for the *lac* operon.
- d) Tryptophan is the activator molecule for the *trp* operon.
- e) All of the above are true.

## **PRACTICE**: Which of the following statements is TRUE?

- a) Lac I is the inducer molecule for the lac operon.
- b) Tryptophan is an inducer molecule for the *trp* operon.
- c) In the presence of lactose, the *lac* operon is expressed.
- d) In the presence of tryptophan, the *trp* operon is expressed.