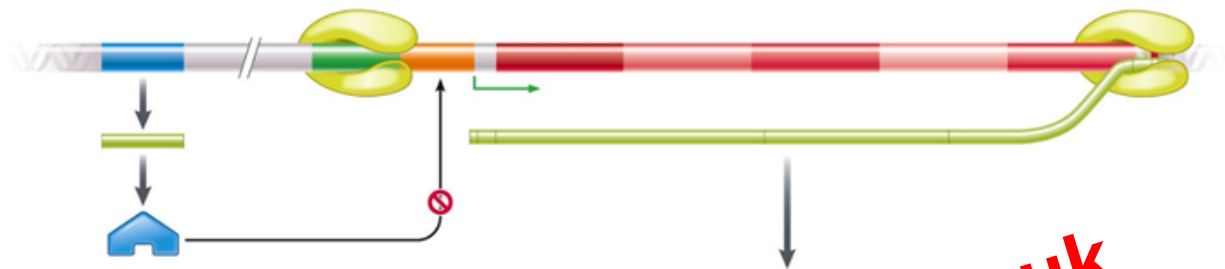


2. *lacY* b. transacetylase
3. *lacA* c. β -galactosidase
4. *lacI* d. *lac* repressor protein

The *trp* operon

Animation:

<http://highered.mheducation.com/olcweb/cgi/pluginpop.cgi?it=swf::535::535::/sites/dl/free/0072437316/120080/bio26.swf::The%20Tryptophan%20Repressor>



Label: Transcription initiation site, termination site, transcription unit, RNA polymerase, and draw in the corepressor (assume the repressor is active as the corepressor bound?)

Label and define --

Regulatory gene:

Regulatory sequences -- What are they for the *trp* operon? Label them.

Regulatory Proteins

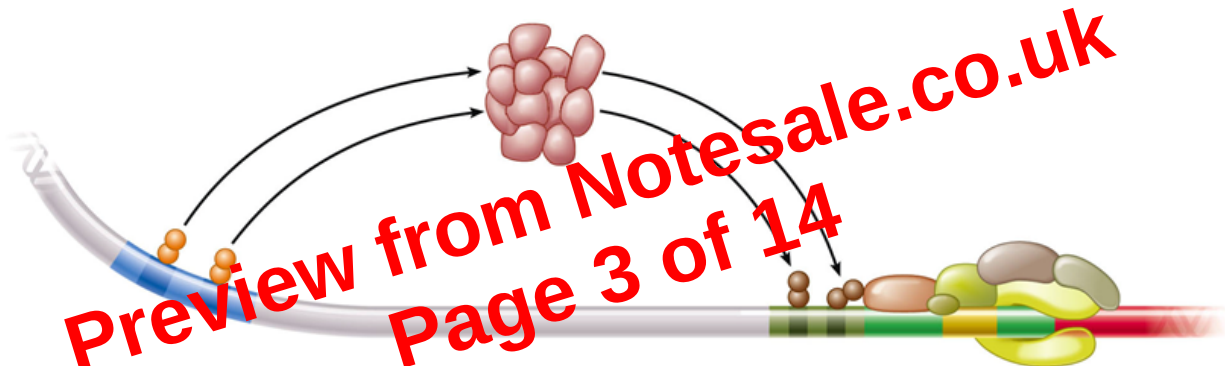
- a. Repressor (active or inactive by default?):

	<i>Lac</i>	<i>Trp</i>
Regulation: Positive or negative?		
Main regulatory protein? <i>Active</i> or <i>inactive</i> by default?		
Is there a secondary regulatory protein? If so, what binds to it?		

What is the molecule that binds to the repressor called?		
Inducible or repressible operon?		
Catabolic or anabolic?		
Prokaryote or Eukaryotes?		

Eukaryotic Gene Regulation

Animation: <http://www.dnatube.com/video/12212/Eukaryotic-DNA-Transcription-Regulation>



Regulatory sequences (what binds to them?)

a. Promoter Proximal Region:

b. Promoter:

c. Enhancer:

Regulatory proteins:

- Activators
- Repressors (not in diagram)
- Coactivator
- Corepressor (not in diagram)
- Transcription Factors (TFs)

Label: Transcription unit and where the 5' and 3' UTRs would be.

Think back! What role does the 3' UTR plays in post-transcriptional regulation?