



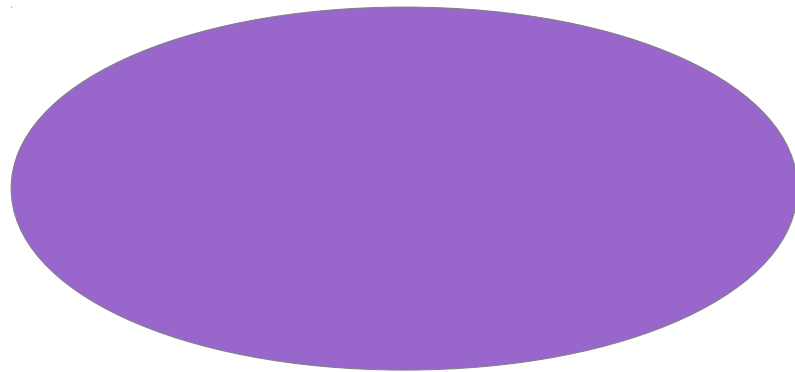
Promotor



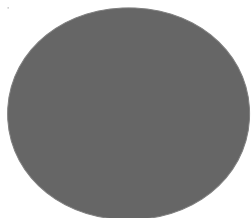
Promotor with activator binding site



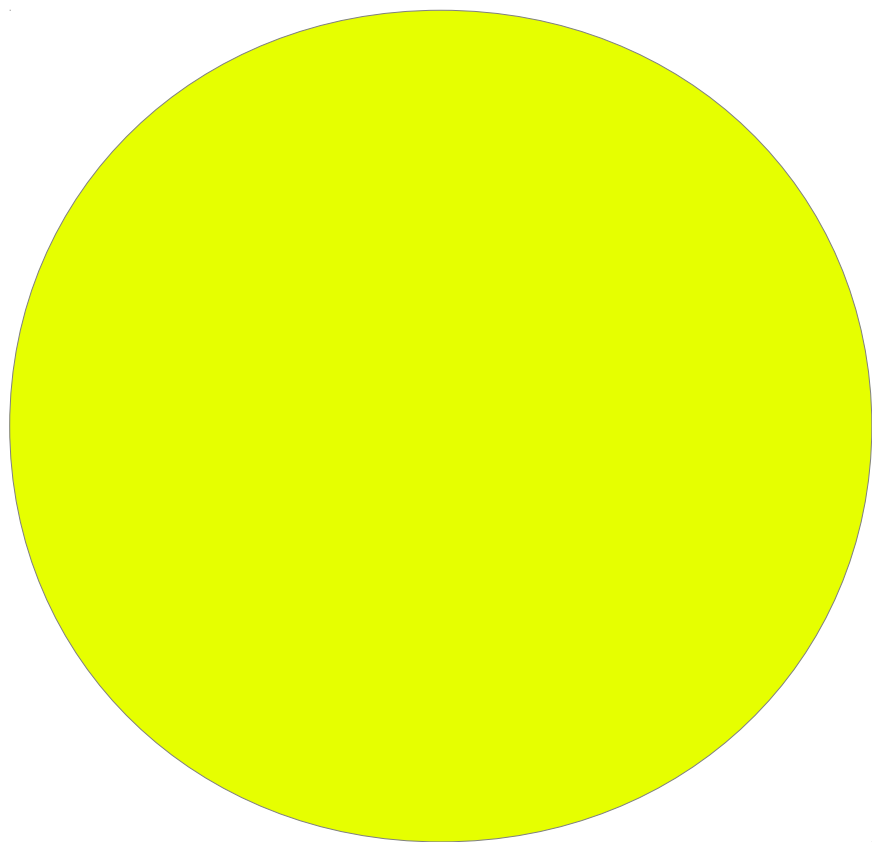
Promotor with repressor binding site



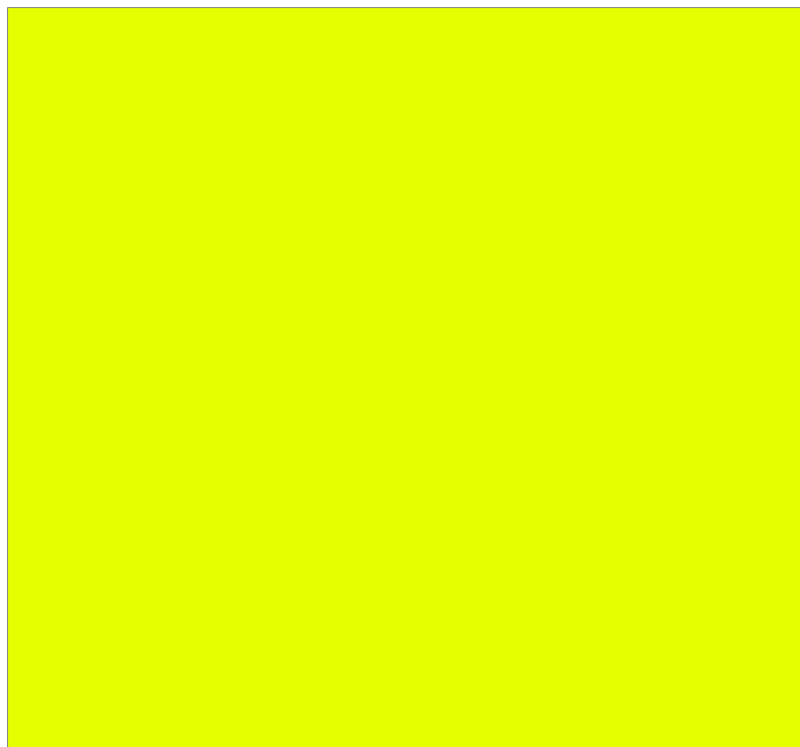
RBS



Ligand

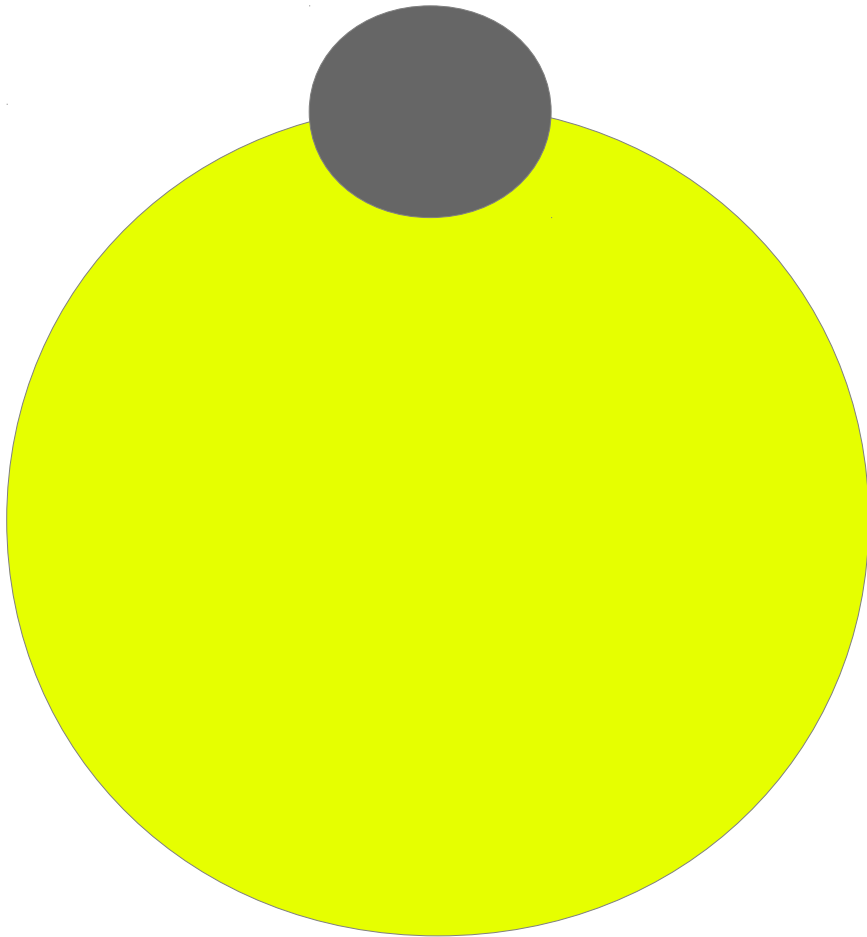


Activator

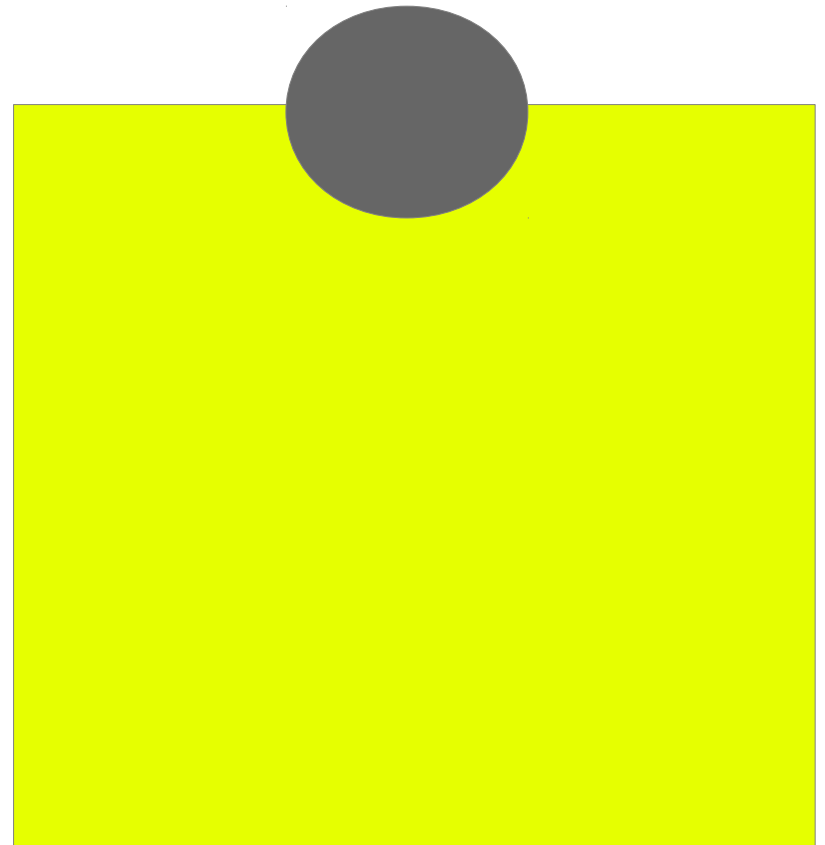


Repressor

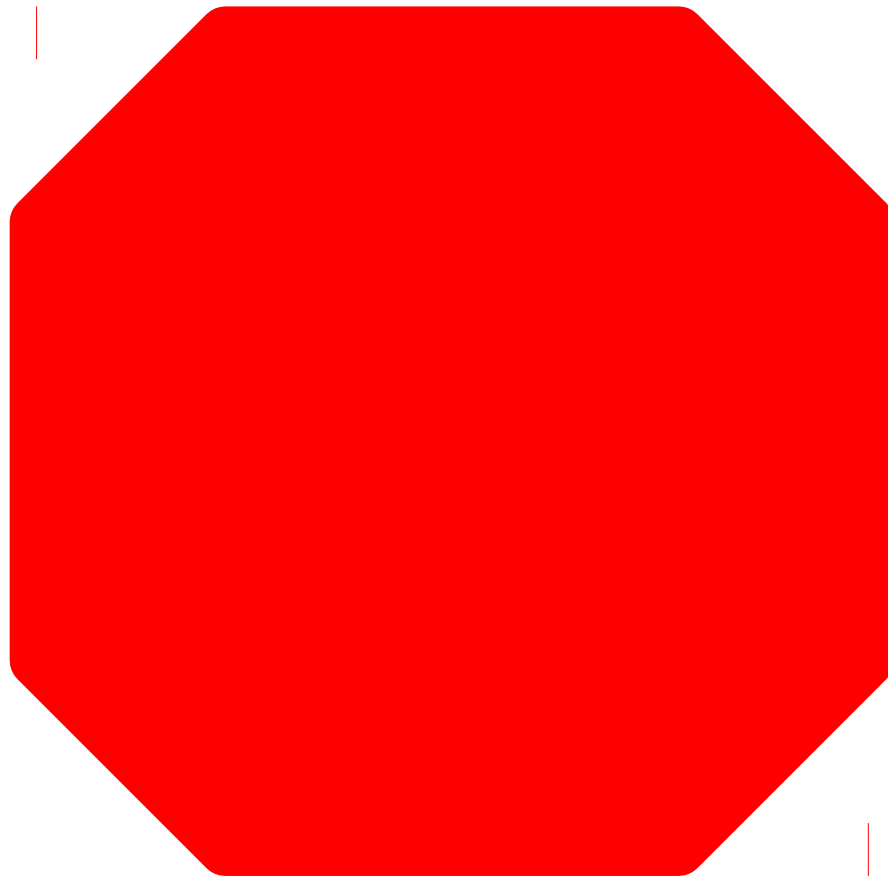
Ligand



Activator



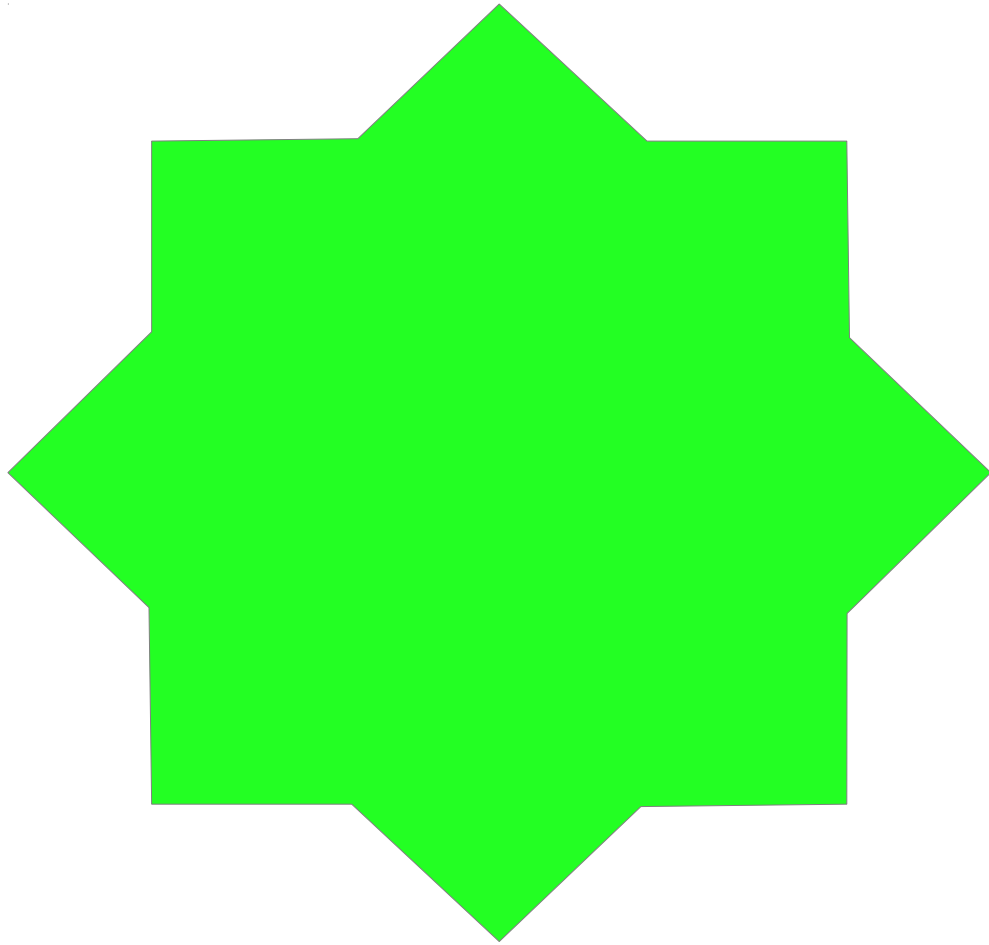
Repressor



Terminator (both transcription and termination)



Gene



Your favourite protein



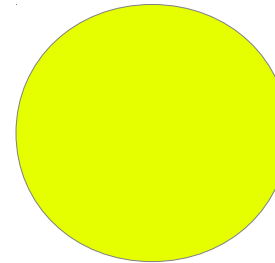
Promotor: a DNA sequence needed to start transcription of a gene



Ligand: a small molecule that can bind to a repressor or activator and make them work.



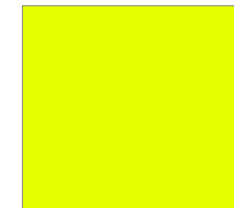
Promotor with a activator binding site. Transcription only starts if the activator is bound.



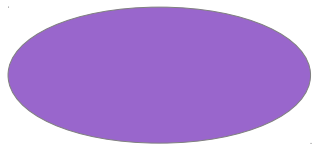
Activator: protein that binds to the promotor and activates transcription. Sometimes the binding of a ligand is needed to make the activator work.



Promotor with a repressor binding site. No transcription if the repressor is bound.



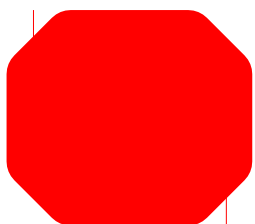
Repressor: protein that binds to the promotor and represses transcription. Sometimes the binding of a ligand needs to make the repressor work.



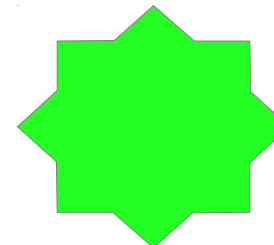
RBS: ribosomal binding site needed for the start of translation



Gene: DNA sequence coding for an activator, repressor or any protein you like



Terminator: here we have a double terminator stopping both transcription and translation.



Protein: a protein doing anything you can think of!