

Source: [KBhBIO101CentralDogma](#)

# 1 | RNA Replication

## 1.1 | The Strands of RNA

- +Strand: reproducible RNA => could be directly translated by the ribosomes
- -Strand RNA: useless template RNA (less easy to be detected)
  - Need to be processed by RDRP (RNA-dependent RNA Polymerease)
  - Once entered the cell, RDRP goes to work copying -Strand RNA to +Strang RNA
- double-stranded RNA viron => (+, a.k.a. sense)
  - +-stranded RNA => same idea as above
  - • strand RNA => virus comes with RDRP that convert -ssRNA to +ssRNA. Then, same idea as above.

### RNA-Dependent RNA polymerease

- RNA viruses does not need host-cell polymeraese to copy RNA
- They come with polymerase that...
  - with dsRNA; takes +ssRNA and makes -ssRNA; combining the two to produce dsRNA
  - with +ssRNA, takes +ssRNA and makes temporary -ssRNA which makes more +ssRNA
  - with -ssRNA, takes -ssRNA, and makes temporary +ssRNA, which makes -ssRNA

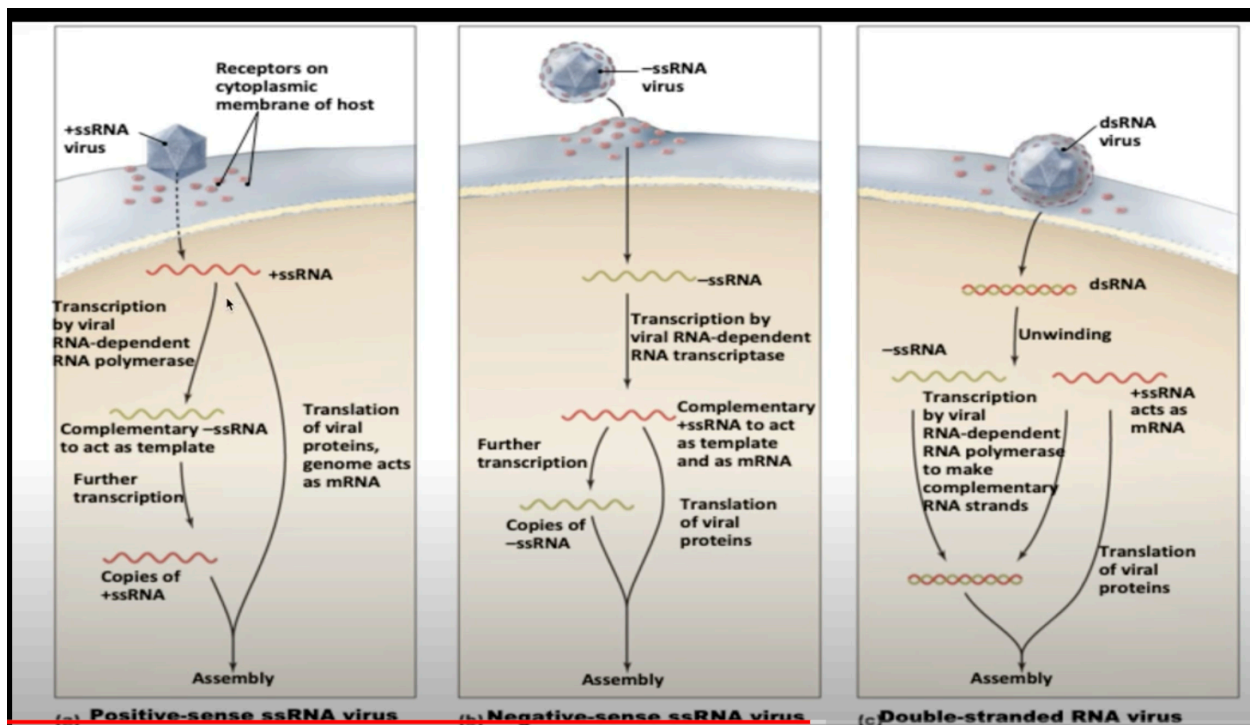


Figure 1: Screen Shot 2020-10-12 at 11.14.30 PM.png