

Epithelial Cells

Nucleus:

- gene on chromosome transcribed
↓
hnRNA spliced and introns removed
↓
hnRNA (now mRNA) has caps placed on ends
↓
transported out nuclear pores
↓

Ribosomes:

"free" ribosome attaches to mRNA, small subunit binds first
↓
translation of mRNA occurs
↓
signal sequence of protein translated
↓
travels to RER
↓

Rough ER:

rest of protein made
↓

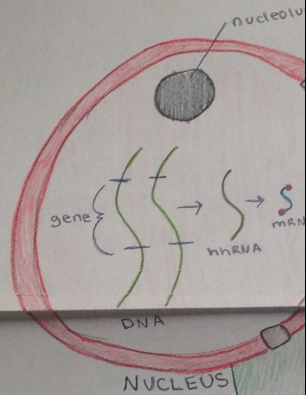
ubiquitin proteins check for mutations
↓

If mutation, the protein is engulfed in vesicle
↓

Lysosome:

lysosome destroys mutation
↓

Golgi Apparatus
- no mutation, protein taken to golgi
- modified
- put in vesicle
- transported out of cell through exocytosis



Question:
What does a membrane transporter do?

CYTOPLASM

Golgi Apparatus